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Network Evaluation for Training and Simulation

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Air Vehicle Simulation Branch Flight Control Division Air Vehicles Directorate Air Force Research Laboratory Wright-Patterson AFB OH 45433-7505

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Advancements in networking ha	ırdwar	e & software have increase	ed the numbers of trainin	g and re	search simulators being used
in networked environments. Va	TIOUS U	echnical issues and proble	ms involved with networ	king sın	nulations exist, one of the
most notable being latency. The commissioned a study into some	≥ IIauu - of the	ing Systems Product Orou	ip (ASC/YWE) of the Ac	ronautic	cal Systems Center
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simulation network configuration	ے ,رحت ای ns to	determine an ontimized are	Maiory. The purpose of a	MIS Stud	y was to analyze unforch
Unit Training Device (UTD) app	nlication	ons with low numbers of e	entities and sites. The bar	poses cic traini	ing program was annou at
with a few local nodes connected	d toget	ther by a WAN was assur	ned. The ideal network c	onfiguta	ation would minimize
LAN/WAN latencies while main	ntainin	g simulation data accuracy	v. Analysis on both the l	ocal and	entire network configurations
was performed relative to effects	s of ne	twork loading. Issues suc	h as bandwidth, latency,	accurac	v thresholds and delay
compensation were investigated.	. Distr	ributed Interactive Simular	tin (DIS) and DIS-Lite pr	otocols	were used. DIS-Lite.
developed under a SBIR contrac	et with	MaK Technologies is a lo	ow-bandwidth protocol fo	r netwo	rked high-fidelity flight
simulations.			-		, ,
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1. Introduction

1.1 Program Background

The Network Evaluation for Training Systems (NETS) program, funded by the Training Systems Product Group (TSPG), studied optimization techniques for simulator networks with Unit Training Device (UTD) applications. It is a follow-on to the TSPG-sponsored A-10 Field-of-View and Networking Study, which focused on the A-10 UTD visual system, but also made observations on networking issues via a 1v1 network emulated at AFRL/VACS. The NETS study researched most of those networking issues in more depth.

1.2 Program Objectives

The NETS program was designed to study networking issues with two 4-ship UTD Local Area Networks (LANs) connected via a Wide Area Network (WAN). Both the LANs and the WAN were analyzed, including such issues as bandwidth, throughput, network loading, Network Interface Unit (NIU) performance, latency, Dead Reckoning threshold, and truth data comparisons. These networking issues were studied using three different UTD network architectures and two different simulation network protocols. The three architectures analyzed included an overall Ethernet connection (all nodes talk to all nodes), an Ethernet connection with gateways (used to filter packets), and an Ethernet connection with gateways to SCRAMNet subnetwork. The two protocols were Distributed Interactive Simulation 2.0.4 (DIS 2.0.4) and DIS-Lite. DIS 2.0.4 is the industry standard for communication between networked simulations. DIS-Lite is a more efficient protocol that doesn't sacrifice performance. It was developed by MaK Technologies under a Small Business Innovative Research (SBIR) contract.

1.3 Report Organization

This report documents the UTD networking study performed at the Air Force Research Laboratory Air Vehicles Directorate's Air Vehicle Simulation Branch (AFRL/VACS). Section 2 discusses background network analysis information. Section 3 documents the NETS networking experiments. Section 4 lists acronyms and Section 5 lists references.

2. Network Analysis

2.1 Networking Background

Throughout the network analysis section, several terms have very specific meanings which are frequently confused. The term "distributed interactive simulation" (not capitalized) refers to the interconnection of remote simulators through networking to allow each simulator to participate in a common, larger simulation. This participation allows for the training of participants or solving of problems in an environment the individual simulators alone could not provide. "Distributed Interactive Simulation (DIS)" (capitalized) refers to the Institute of Electrical and Electronics Engineers (IEEE) 1278 series specification for a distributed interactive simulation protocol. It should be noted the IEEE 1278 series protocol is but one way to perform distributed interactive simulations — several locations have developed other viable solutions. IEEE 1278 is by far the most prevalent protocol due to its IEEE open standard status. However, during the course of this study, the Department of Defense (DoD) mandated that all DoD simulations use a new type of simulation network architecture/communications method called High Level Architecture (HLA). Unless a waiver is approved, non-HLA simulation programs cannot be funded after October 1, 1998 ('No Pay') and cannot participate in defense testing and/or exercises ('No Play') after October 1, 2000.

Until HLA has been implemented, DIS is still the most usable standard. The current version of the IEEE DIS standard (as of this writing) is Version 2, Draft 5, also known as DIS 2.0.5 - first used publicly at the 18th Interservice/Industry Training Systems and Education Conference (I/ITSEC) held December 2-5 1996 in Orlando, Florida. DIS 2.0.5 is simply the IEEE-approved version of DIS 2.0.4, although there are a few minor differences. DIS 2.0.5 was released during the later portion of this program and was therefore not used (DIS 2.0.4 was used instead). In the past, new drafts of the DIS protocol were periodically generated, with the IEEE DIS Committee reviewing them for official IEEE approval. The IEEE DIS Committee met on a semi-annual basis (March and September) to discuss proposed changes to the standard. Due to the introduction of HLA, there will only be one more version of DIS (DIS 2.1.4).

The DIS protocol specifies the data fields for IEEE 802.3 (Ethernet) packets known as Protocol Data Units (PDUs). PDUs are transmitted over the network using User Datagram Protocol/Internet Protocol (UDP/IP). This is shown in Figure 3.1.

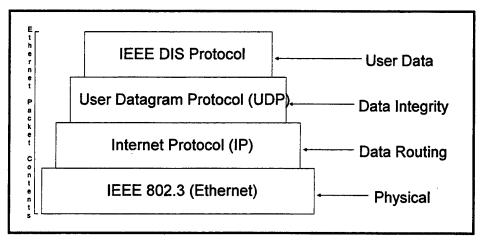


Figure 1 - PDU Construction

PDUs come in many different types; each type is designed to communicate a specific piece of simulation information to other simulation sites. The most common PDU type, the Entity State PDU, is designed to convey the locally simulated "entity's" (combatant) "state" (location, velocity, acceleration, roll, pitch, yaw, etc.) information to other (interested) simulators. Other PDU types announce a weapon firing, a weapon detonation, entity collision(s), radio transmissions, radar and other electromagnetic emissions, simulation control (start, stop, freeze, and resume), and logistics. Whenever a simulation has such information to send to other simulation sites, it processes the information, formats it into the PDU format, and sends the PDU out over the network to the other simulation sites.

PDUs are typically broadcast over the network. That is, the information is not destined for a single simulation site, but rather it is sent to every simulation site on the network. It is up to the local site to filter out, or ignore, the PDUs it is not interested in. For example, an Army tank simulation might filter out Navy ship simulation PDUs, as the tank simulation does not require ship simulation information to function properly (unless the Army tank is near the Navy ship).

Filtering network traffic is a critical process. Physically, computer systems have limited memory and processing capability. While memory space continues to increase and processing capabilities grow, a large network simulation (like Warbreaker or the Synthetic Theater of War exercises), containing thousands of entities generating many thousands of PDUs during the course of the simulation, could easily overwhelm a simulation computer with information. Filtering reduces the simulation computer processing workload so it may concentrate on performing its own simulation rather than processing the network traffic. Often, a separate computer is used to access the main network - even in this case, it is wise to filter out unimportant entities.

Similarly, a process known as "dead reckoning" is a crucial part of the DIS protocol suite. Protocols before DIS had no dead reckoning. Each entity was required to continuously transmit its state information to the other simulation sites, resulting in flooded networks choked with stale information. DIS uses dead reckoning to reduce the information transferred between sites. Each individual site maintains a "copy" of both its own and the remote simulation entities. Based on past knowledge, the local simulation site predicts (extrapolates) the current and future states of the entities (dead reckons), and unless new information is given, the local simulation assumes the entities are where their dead reckoned positions places them. The dead reckoning algorithm utilizes a user set threshold for angular and positional errors. If the dead reckoning threshold is not exceeded, the aircraft state is typically updated at a 5 second time interval (often called a "heartbeat"). This process, while greatly reducing the amount of network traffic, causes severe problems with endgame situations. Often, weapons run on the local simulation computer will claim a hit based on the dead-reckoned network entity. However, the target aircraft might have escaped the weapon's attack by performing some maneuver that the dead-reckoning wouldn't account for, leading to a "I-hit-you-no-you-didn't" issue with negative training implications.

2.2 Current State-of-the-Art in Distributive Interactive Simulation

DIS 2.0.5 specifies several PDUs, which range in size from 64 bytes to approximately 1500 bytes. In a network simulation, it is generally known that the most common PDU is the Entity State PDU, followed by Fire and Detonation PDUs. Other often used PDUs include Collision, Signal, Transmission, and simulation control PDUs (Start, Stop, etc.). The Emissions PDU, although not often used, could very quickly flood the network due to it voluminous RADAR information. Thus, the Emissions PDU, when used, is often more numerous than the Entity State PDU.

In general, the system works well. In fact, several large simulation exercises (I/ITSEC, Synthetic Theater of War [STOW], Synthetic Theater of War in Europe [STOW-E], Warbreaker) have been performed using various versions of DIS. For the most part, these exercises had little problem with network communications, and the goals of the exercises, from a connectivity standpoint, were met.

However, there are problems with the current DIS specification. For example, PDU design is a critical issue. A PDU containing too much, redundant, or unnecessary information wastes valuable network bandwidth. Incomplete PDU design requires individual simulation sites to interpret the specification, leading to possible incompatibilities. For highly dynamic vehicles such as fighter aircraft, the two most valuable PDUs are the Entity State and (electromagnetic) Emissions PDUs. For these PDUs, the Entity State PDU is over specified (too much redundant information) and the Emission PDU is under specified (it contains incomplete or "To Be Determined [TBD]" PDU fields). Fighter aircraft in constant motion generate tremendous numbers of Entity State PDUs. This leads to the problem of a significant portion of the network bandwidth being consumed by redundant Entity State PDU information. In past simulations, Entity State PDUs have choked networks because of their large size (up to 1400 bytes) and transmission frequency. This lead to the development of the Dead Reckoning Algorithms explained earlier, which helps to alleviate the bandwidth problems by allowing only data that exceeds a certain value to be sent. Another problem is caused by fighter aircraft relying heavily on their electromagnetic sensors, such as radar and Electronic Counter Measures (ECM). But the Emissions PDU is under specified, so few network simulations have exploited the Emissions PDU. Fighter aircraft have been left blind and defenseless unless the simulation sites specifically modified their simulations to account for broadcast emissions and radar signatures.

Vendors providing DIS 2.0.5 compliant network interfaces are continually updating their products to improve their performance and accept new DIS protocol changes. In the near future, many of the problems seen in the current state-of-the-art might be corrected, hopefully allowing network simulation to provide the complete functionality for which it was envisioned.

2.2.1 MäK Technology's VR-Link

NETS used VR-Link to produce the DIS packets. The VR-Link software package from MäK Technology is the most commonly used DIS protocol package. VR-Link consists of DIS protocol interface routines written in the C⁺⁺ programming language. The software was designed to run on numerous platforms using either the computer's default or other installed Ethernet ports.

Using VR-Link has several advantages. First, it is a software-only solution written in an object-oriented language. Modifications to the internal VR-Link code have no effect on the external simulation programming, unless VR-Link functions are completely removed. Second, VR-Link is inexpensive, currently running approximately \$2000 per copy. Finally, MäK Technology is continuously updating their software to make sure it is fully compliant with the latest DIS protocol specification.

VR-Link does have a few disadvantages. Most notably, VR-Link is merely a set of libraries. There is no Graphical User Interface (GUI) and no easy way to integrate VR-Link into a local simulation except through some detailed programming.

Despite this, VR-Link is a very versatile product and is currently being expanded to become HLA-compliant - allowing backwards compatibility for simulations currently using DIS and VR-Link.

2.3 Possible Network Limitations

Currently, distributed interactive simulations have limitations. Like any tool, distributed interactive simulation has tasks for which it is most useful and tasks it cannot perform well or at all. The list provided here is not an exhaustive list of problems with distributed interactive simulation. The problems discussed here are related specifically to air vehicle simulations and could be considered the more critical problems to be addressed by the distributed interactive simulation community.

2.3.1 Highly-Dynamic Vehicles

Highly-dynamic vehicles change state rapidly and often, thus generating many Entity State PDUs (note that any change in direction, velocity, or acceleration forces the creation of an Entity State PDU to update the dead reckoned models over the network). Since PDUs are Ethernet packets, and since there is a tremendous number of them, the probability of Ethernet packet collisions increases and the network becomes "flooded." In addition, since the information transmitted between simulation sites incurs a time delay (latency), the usefulness of the information contained in a given PDU may be questionable due to its age and quite often may be useless. Following is a description of the problems associated with Ethernet collisions, transmission latencies and latency effects.

2.3.1.1 Ethernet packet collisions

The IEEE 802.3 (Ethernet) standard is a 10 Mb/sec network media operating with Carrier-Sense Multiple Access/Collision Detection (CSMA/CD). CSMA/CD simply stated means a "talker" on the network first determines if the network is free of traffic. If no other talker is transmitting, the message is sent over the network to whomever is "listening." However, if two (or more) talkers attempt to talk at the same time, there is a "collision" and each talker stops talking and waits a random amount of time before retransmitting its message.

Because of this, a normally loaded Ethernet network with a theoretical bandwidth of 10 MB/sec rarely achieves an actual bandwidth larger than 4 MB/sec due to increased collisions at higher bandwidth usage. Heavily loaded Ethernet networks degrade logarithmically. This is due to the sheer number of collisions and the random time-out period. The network simply has too many talkers generating far too many collisions.

2.3.1.2 Transmission Latencies

Transmission latencies in this paper are those time delays resulting from the transmission of data between two or more simulation sights. Information when transmitted takes a certain amount of time to arrive at its destination, due, in part, to the physical limitation imposed by the speed of light. Theoretically, information traveling at the speed of light (186,000 miles/second in free space [vacuum]) would take 13.4 ms to travel to Los Angeles, CA from Dayton, Ohio (approximately 2500 miles). Practically, the theoretical limits are never met (due to network hardware, buffering, routing, etc.), and the information takes even longer to get to its destination.

Additionally, Ethernet transmits information at a theoretical 10 Mb/sec data rate. However, since most simulation sites performing a distributed interactive simulation are remotely located, commercial telephone data-grade T-1 lines (1.544 Mb/sec) are typically used. Due to telephone signaling and data integrity algorithms (error detection and correction), the effective bandwidth of the T-1 line is closer to 1.0 Mb/sec, which is one-tenth the bandwidth of Ethernet. A device called an Ethernet Bridge must be installed to queue (store) outgoing Ethernet packets, as the T-1 line cannot handle the full Ethernet bandwidth. Queuing incurs further latency. Packet

switching and data bundling, both of which are common network communications methods, also incur some amount of latency as packets are stored and forwarded.

2.3.1.3 Effect of Latency

If the transmission latencies are on the order of the simulation event timelines, the information is (most likely) useless when it arrives. For example, should an F-15E acquire a surface-to-air missile (SAM) site, the SAM would normally activate its radar jamming equipment. From the time the F-15E activates its radar to the time the SAM begins jamming that radar could be as little as $20 - 50 \, \mu s$. Networking a simulation such as this could be futile if the network delays approach 50ms, as the simulation computers have no time to receive the PDU, interpret the PDU data, inject the data into the simulation and process the simulation model's response. Pilot perception is a key point here - if the latencies cause the pilot to perceive an unrealistic event to occur, then the simulation is useless, or even worse, promotes negative training. Also, these latencies - or over compensating to provide untrue latencies within a normal weapons system could create a misleading effect of some new networked weapons system technology.

2.3.2 Weapons Flyout

A special class of highly-dynamic vehicles would certainly include missiles and air weapons. Their tremendous speed with respect to other simulation entities poses several problems for the simulation hosts on the network. First, these weapons advance tremendous distances during the network latency time periods, making them difficult to dead reckon. Second, they are using dead reckoned positional information for their arming and detonation sequence calculations (remember, dead reckoned information is by nature inaccurate). Finally, the missile "end-game" is on the order of the network latency time periods (milliseconds or less), so the missile models frequently return erroneous calculations and miss their intended target, when they should have scored a "kill." These problems result in frequent "missile lock" errors and misses during an air engagement.

One possible solution to this problem would be to run the specific missile or air weapon on the same simulation computer as the vehicle being targeted. This would allow for synchronous operation of the weapon and target, resulting in more accurate results. A problem associated with this is the need to transfer the weapon model to all other facilities playing on the network. This can lead to problems when using other-than-unclassified weapons, as well as integration problems if there are numerous sites participating in the exercise. Another possible solution would be to use a weapons server. A weapons server, which could be one or many computers on the network, would hold all models for all usable weapons during the exercise. When a weapon is used, a command is sent to the server from the initiating entity. The sever would then run the weapon, or optionally, send the model to the target site for localized running. While NETS did not address these issues, they would logically be follow-on work candidates.

2.3.3 Emissions

Air combat relies heavily on sensors and emissions. Emissions include targeting radar, weather radar, infrared sensors, some data communications, and ECM. The difficulty in modeling electromagnetic spectra adequately is reflected in the IEEE DIS specification, which leaves many data fields in the Emissions PDU blank or user-definable. For specific large simulations, simulation directors have specified, for their simulation, the data fields in the Emissions PDU. However, there is no clear, generally-used definition for many of the critical Emissions PDU data fields, so the Emissions PDU is typically ignored. This seriously hampers the pilot's ability to perform his mission, as the tools he heavily relies upon are not there for him to use in the

simulation. The simulation loses credibility and most, if not all, training value is lost. In addition to lost training value, simulations with inaccurate emissions could lead to increased cost and schedule risk for networked research and development systems acquisitions.

The networking simulation community is well aware of this limitation, and the ongoing work to improve the specification is progressing. However, as of the date of this report, no Emissions PDU specification has been issued. Note, once the Emissions PDU specification has been adequately developed, all simulation sites requiring its use will need to upgrade their DIS interface and simulation interface processes to use the PDU correctly.

2.4 Future

The future of distributed interactive simulation is a bit murky at the moment. While there were problems with DIS, some meaningful simulations were accomplished. Since HLA will be replacing the DIS protocol, most simulation sites will be taking time to understand HLA and change from DIS to HLA. The next few years will be rather turbulent as simulation sites make these conversion decisions and implementations. HLA and DIS++ (the future versions of DIS) are explained in Appendix A.

2.4.1 More Efficient DIS-Based Protocols

One method to reduce the network bandwidth required to perform a distributed interactive simulation is to design the most efficient network protocol possible. An efficient network protocol would not contain redundant information in each PDU, nor would it contain information not germane to the simulation or PDU information content. Unfortunately, the current DIS specification has data redundancies, and the prime example is the most commonly-used PDU, the Entity State PDU.

Several design teams have been studying the Entity State PDU to improve its design and efficiency by removing unnecessary information and transmitting static information only once. Currently, MäK Technology has proposed breaking the single Entity State PDU into two new PDUs, the Query Response PDU and the Kinematic PDU. The Query Response PDU will be issued in response to a query from a remote simulation site. This PDU contains the formerly-redundant (static) information in the Entity State PDU. The Kinematic PDU contains the true simulation state information. Essentially, the Kinematic PDU is the Entity State PDU with the redundant information removed. This protocol is called DIS-Lite, and papers about it were published at the 13th & 14th DIS Conferences.

The status of these more-efficient protocols remains in considerable doubt. With most organizations switching to HLA, current research into these more-efficient DIS-based protocols may cease.

2.5 Simulator Network Analysis Project (SNAP)

To precisely determine where latency exists in networked simulations, a simulation network analysis tool is required. In 1993, the Air Force Research Laboratory Air Vehicles Directorate's Air Vehicle Simulation Branch (AFRL/VACS) [then called the Wright Laboratory Flight Dynamics Directorate's Control Integration and Assessment Branch (WL/FIGD)], located at Wright-Patterson Air Force Base (WPAFB), Ohio, began the development of this analysis tool. The program was called the Simulation Network Analysis Project (SNAP) and was funded by the Training Systems Program Office (SPO) which is part of Aeronautical Systems Center (ASC), also at WPAFB.

The resulting analysis tool, the SNAP computer, can dynamically measure latencies and simulation accuracies between vital points (stick input, state variables, visual displays, and the Network Interface Unit - or any other points of interest) in a stand-alone simulator and/or between networked simulators.

2.5.1 Capabilities and Description of SNAP

SNAP grew out of a need to determine the ability of current DIS networks to handle the high fidelity networked simulations required by the Air Force. This project focused on the time delays and simulation accuracies associated with networked simulations of highly dynamic vehicles over long distances (or "long-haul simulations").

There are several time delay issues that SNAP addresses. Total end-to-end network delays are important to know (to remain under the 100ms rule of thumb), but latency values at certain subsections within the overall network are equally as important. Other latency issues include time correlation of cues, and how a pilot in one simulator perceives aircraft actions of a second simulator. To determine the time delays associated with the network for these types of issues, a portable timing analysis unit (SNAP) was developed. In addition, an Electronic Visual Display Attitude Sensor (EVDAS) and interface was developed to enable SNAP to measure when the pilot's visual display received updates. These two units together with the associated software make up the SNAP system (Figure 2).

One SNAP computer can operate alone to determine several performance factors of a single simulator; such as stick input to out-the-window (OTW) video delay, stick-to-instrument delay, stick-to-state variable update delay, stick-to-PDU transmission delay, PDU reception to state variable update delay, and PDU reception to OTW video delay. Also, multiple SNAP computers can evaluate the performance of a networked simulation by connecting to simulators in geographically separate locations and monitoring the end-to-end delay. SNAP can also monitor a network and give statistics on network traffic; from generic Ethernet packets to particular PDU types. SNAP is capable of driving the simulator input signals, allowing the SNAP operator to have repeatable test results. SNAP's measurements between simulators located anywhere in the world are accurate within 500 microseconds.

To accurately obtain data from a simulator, SNAP is capable of operating synchronously (i.e. sample data consistently at the same time slice within the frame) with a simulator in two different ways. The first is to synchronize SNAP's sampling time with the simulation computer's frame time. The second method is for SNAP to synchronize with the refresh rate of the video display system connected to EVDAS. SNAP is also capable of sampling at a user-specified frequency that is independent from the simulator, although this is usually undesirable (but occasionally useful when obtaining the interrupt from the simulator is too difficult). SNAP can be configured to collect data using any combination of sampling methods previously mentioned, but wherever practical, SNAP should be used in synchronous mode to avoid asynchronous sampling problems.

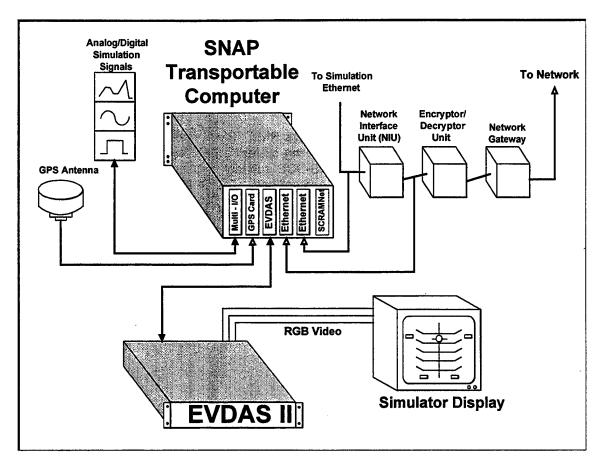


Figure 2 - SNAP Connection Diagram

2.5.2 SNAP Hardware

The SNAP computer [BRYANT94] and [WOODYARD96] is a rack mounted system with an Intel 150MHz Pentium PCI/ISA bus system and an integrated 9.4" SVGA Liquid Crystal Display (LCD). It has 16Mbytes of RAM, a 3.5" floppy drive and a 270 Mbyte SyQuest removable cartridge drive. The SyQuest cartridge can be removed and secured if it contains sensitive information. This system configuration was used for all NETS tests.

The computer's expansion slots house several off-the-shelf PC cards and an in-house developed EVDAS card. The off-the-shelf PC cards include a multi-function input/output board, two Ethernet boards, a Global Positioning System (GPS) board, a SCRAMNet board and a SVGA video card.

SNAP, through National Instruments' multi-function Input/Output (I/O) card, has two analog signal outputs, eight differential analog signal inputs, and four digital I/O channels (16-bit, 4-bit, 2-bit, and 1-bit). The multi-function board provides several counters/timers for frequency and event counting. The board also has an external sync input capability. This board is used to drive stick signals and/or record simulator state variables.

3Com Ethernet boards are used to passively extract PDU information from any network running DIS. Using two Ethernet boards enables a single SNAP computer to monitor PDU traffic at two different points within a single simulation site.

3. **NETS Networking Experiments**

3.1 Background/Problem

Increased emphasis has been placed on the concept of training by using multiple simulators networked together in one synthetic environment. Air Combat Command calls this "revolutionary training" and is allocating up to 25% of flying hours to simulation flying hours. To increase training effectiveness, multiple simulators will be networked together to facilitate squadron-level training. This type of training is important because it allows pilots to train jointly against various aggressor threats. An even better training effect is to allow two different squadrons to train against each other. This maximizes training benefit and flying hours. Positive training, however, requires that the simulators be connected together efficiently enough to not affect pilot cues and responses. This is especially important when two geographically-distinct squadrons are connected together.

The NETS program was developed to evaluate a network environment in which two geographically-separated squadrons' UTDs were connected together (Figure 3). Each squadron consisted of four UTDs. All four UTDs in each squadron were connected together via a LAN. The two squadrons were connected together via a Long Haul Network, also known as a WAN. The NETS program simulated the UTDs, the LANs, and the WAN.

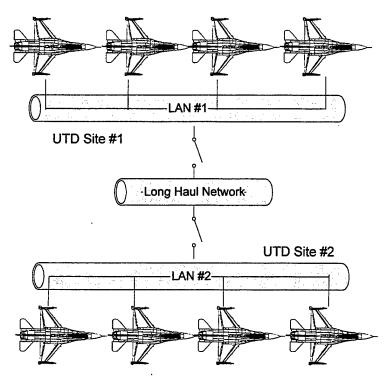


Figure 3 - NETS Network Configuration

The NETS study is a follow-on to another TSPG-sponsored study: The A-10 UTD Field of View and Networking Study [ZEH95], conducted in 1995. That study, which primarily investigated the capability of the A-10 UTD visual system, also performed limited networking investigations. These investigations included evaluating various Network Interface Units (NIUs) and comparing synchronous versus asynchronous operation of the NIU and simulation - all with one versus one (whereas NETS tested under four versus four conditions). Through the investigations, the study

recommended the use of VR-Link from MaK Technologies for a software implementation of an NIU. The study also recommended running the NIU synchronous with the simulation.

3.2 NETS Objectives

The NETS program was designed to investigate networking aspects of two four-ship squadrons connected together via a long-haul (long distance) network. NETS had four objectives:

- Develop Optimized Network Architectures for UTD Applications
- Compare the Improved Network Protocol Designed for Highly Dynamic Air Vehicles (DIS-Lite) with Standard Protocol (DIS)
- Understand Network Performance Issues Using Simulator Network Analysis Project Tools
- Recommend an Architecture with the Best Bandwidth Utilization/Truth Data Performance

The first objective reflects the development of optimized network architectures to be tested. These architectures were designed with the intention of connecting two geographically-separate four-ship UTD squadrons. Three different architectures were designed for this program, and are described later. Both the LANs and WAN portions were analyzed, including issues such as bandwidth, throughput, network loading effects, NIU performance, latency, Dead Reckoning threshold effects, delay compensation, and truth data comparisons.

The second objective refers to the comparison of network simulation protocols. Two communication protocols were studied - Distributed Interactive Simulation (DIS) and DIS-Lite. The version of DIS used during testing was IEEE DIS Version 2, Draft 4 (DIS 2.0.4). Although there is a newer DIS standard - IEEE 1278.1 (DIS 2.0.5), it was released during testing and was therefore not used. DIS 2.0.5's changes were minor (i.e. adding a few new types of protocols) over DIS 2.0.4, resulting in little impact to this study. DIS-Lite is an experimental low-latency, low-bandwidth protocol under development by MaK Technologies [TAYLOR95] [TAYLOR96] (through a Small Business Innovative Research [SBIR] contract monitored by AFRL/VACS). DIS-Lite splits the Entity State PDU into static and dynamic PDUs which are called the Query Response and Kinematic PDUs respectively. This results in a lower bandwidth requirement since only altered data is sent across the network.

The third objective refers to conducting objective measurements of the network performance. While it is very important to get piloted opinions on the perceived performance of a simulator, it is also important to get real numbers. These numbers can be used to quantitatively distinguish network architecture configurations.

The fourth objective is the summary of the entire report. This program was commissioned by TSPG to help determine how to connect UTDs. This report makes recommendations on network architectures based on the results obtained during testing.

3.3 NETS Approach

The NETS program followed an eight step approach. These steps, listed below, are described in further detail in the remaining sections of the report.

- 1. Design Viable Architectures
- 2. Create Testbed Architectures on AFRL/VACS Computer Deck
- 3. Design and Create Networking/Architecture/Simulation Software
- 4. Integrate SNAP into Testbed Architectures
- 5. Develop Test Scenarios and Test Setup
- 6. Conduct Evaluation Test Runs
- 7. Reduce Test Data and Analyze
- 8. Make Recommendations

3.4 Step 1: Design Viable Architectures

Creation of viable network architectures was the first step in the NETS program. These architectures were designed with the fundamental purpose of the program in mind - two squadrons of UTDs connected via a long-haul network. Since long-haul network lines between two geographically-separate squadrons would typically be purchased from telecommunication companies, NETS ignored designing this long-haul link, and instead simulated the performance of a typical WAN link (described in the next section). While the WAN link would simply be purchased, the training squadrons would have control over the design and implementation of the LAN - therefore this program focused on those LANs. Three test configurations were created and named:

- Simple Ethernet Architecture
- Ethernet with Gateways Architecture
- SCRAMNet Architecture

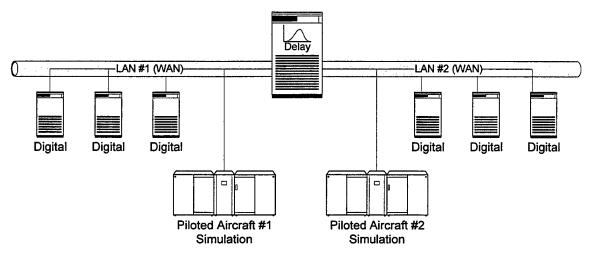


Figure 4 - Simple Ethernet Architecture

The first network (Figure 4) had all eight simulated UTDs connected to the same Ethernet network with the simulated long-haul network between the two UTD LANs. This forced each UTD node to handle all packets on the network.

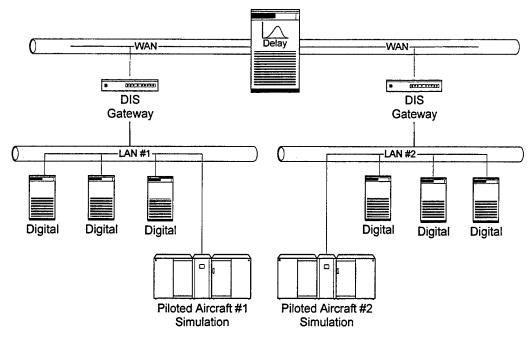


Figure 5 - Ethernet with Gateways Architecture

The second network (Figure 5) was similar to the first, but incorporated a gateway at both WAN-LAN connection points. This is a typical configuration when multiple simulators at different sites are networked. This gateway filtered the network traffic entering and leaving the LAN. Typically, the data filtered out would be data from other non-related simulations, or other general network traffic. If only two UTD LANs were connected together, then the gateways would typically only be filtering general network traffic - all simulation traffic would pass through the gateway.

The power of this architecture is evident when multiple UTD sties are connected on the same large network, yet only two sites want to talk to each other. In this case, the gateways would filter much information that is irrelevant to the ongoing simulation.

Another advantage of this architecture is that each LAN could use zero threshold settings. This would allow the simulations on the LAN to keep very accurate information about each other. In this case, the WAN data would be dead reckoned by the gateways.

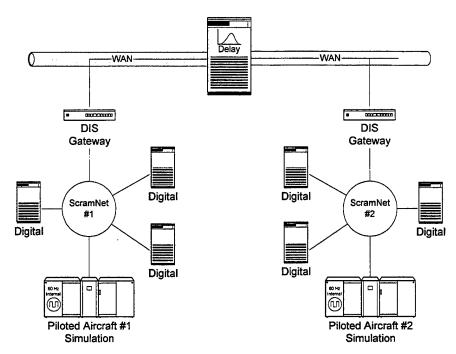


Figure 6 - SCRAMNet Architecture

The third network (Figure 6) was the same as the second, except that it used SCRAMNet instead of Ethernet for the LANs. SCRAMNet is a method used to implement a distributed shared memory. The advantage of this architecture is that it allows each simulation on the LAN to trade information with each other through memory location writes/reads (much faster), and dispenses with the communications overhead that Ethernet requires (much slower).

3.5 Step 2: Create Testbed Architectures on AFRL/VACS Computer Deck

To test and evaluate these proposed network architectures, each architecture was constructed on the AFRL/VACS computer deck. Each UTD was simulated, resulting in eight total UTD simulations. Each architecture was also constructed in the testbeds by arranging the various AFRL/VACS in-house networks and hardware. The following sections discuss the hardware used to create the testbed, and how the architecture testbeds were actually constructed and implemented.

3.5.1 Testbed Hardware

A total of two Encore RSX Series computers and one Silicon Graphics (SGI) computer were used. The SGI computer was an eight-processor Challenge XL. Two of AFRL/VACS's Piloted Combat Stations (PCS) were used to provide human player interaction. In-house Ethernet and SCRAMNet networks were used to connect the simulated UTDs. AFRL/VACS's SNAP equipment was used to determine latencies within and between the simulators. The following sections describe the NETS hardware, software and network architectures under investigation.

3.5.1.1 Encore RSX Series

Two Encore RSX computers were used to run generic F-15-like simulations. Synchronous operation of the simulations (and other networked machines) was achieved by using a timing pulse from one of the Encore RSX machines. This synchronous operation could be achieved at remote sites by synchronizing on interrupts from GPS cards. The Encore RSX Series machines each had one RSX 100 MHz CPU with a SCRAMNet card and an Ethernet port and were connected together by a Reflective Memory System (RMS). RMS is a proprietary reflective memory system developed by Encore. The Ethernet boards for the Encore computers were built in-house. SCRAMNet was used for transfer of simulation packets on one architecture, transfer of simulation data to the NIU computer, and for transfer of GPS time to all machines in all three architectures. The Encore computers were connected to the AFRL/VACS simulators via a fiber optic CAMAC I/O system. This system converted the raw signals from the simulator's sticks/buttons/switches into usable digital data. These machines handled the simulation executive for the piloted players (written in FORTRAN).

3.5.1.2 Silicon Graphics Computer

The Silicon Graphics Challenge XL computer, referred to as SG16, was purchased especially for the NETS program. It contained eight R4400 200 MHz processors (seven available for real-time purposes), a SCRAMNet card and a built-in Ethernet port. It also utilized an SGI VME E-Plex board for increased Ethernet connectivity. This board was connected to the I/O backplane and contained eight individual Ethernet ports. Due to the direct backplane connection, the E-Plex option had the same capability as eight separate Ethernet cards, but cost less.

The Silicon Graphics Challenge computer was used to implement the two NIUs (one NIU per processor), handle the six UTD digital players (three digital entities per processor), simulate a long haul network with variable delays corresponding to measured network performances [SWAINE95] (using one processor), and simulate the two gateways to the LANs (one processor for each gateway).

3.5.1.3 Piloted Combat Stations

AFRL/VACS's Piloted Combat Stations were used to allow for testing simulator and end-to-end network delays. Using the PCSs allowed SNAP to record end-to-end delays (i.e. input stick information on one PCS, and record the changes shown on the OTW visual of a second PCS). AFRL/VACS's PCSs used a 29" monitor for a combined Heads-Down Display (HDD) and OTW view, and used Hands on Throttle and Stick (HOTAS) controls. A "virtual-dome" effect was created by placing special symbology on the OTW display [ZEH95]. This symbology indicated the relative positions of aircraft normally visible in a full dome simulator.

3.5.1.4 Ethernet Network

Four separate Ethernet networks were used for this program. Standard 10Base5 thicknet cable was used as the LAN backbone and had end taps connecting to Attachment Unit Interface (AUI) transceivers. These transceivers were connected to eight-port 10BaseT hubs (four total) and individual simulation computers. The Challenge was connected to the hubs with 10BaseT cable. The Encores were connected directly to the backbone via AUI connections. This setup allowed the NETS network configurations to be easily modified with minimal impact to the rest of the AFRLVACS simulation facility.

3.5.1.5 Simulation Network Analysis Project

SNAP was developed to analyze long haul network latencies and characteristics. It performed complete end-to-end analysis of the NETS testbed. For the purposes of this report, end-to-end delay is defined as the delay from when the stick in one simulation moves to when the results of that movement can be seen on the second simulation's OTW display - this includes the dynamic performance of the aircraft model. In previous experiments, analysis of SNAP data indicated that the majority of end-to-end latency was due to the NIU. Since it was able to analyze the network latency as well as end-to-end latency, SNAP was ideally suited as a data collection tool for NETS. SNAP provided a repeatable stick input and recorded the result on a remote simulator's visual system. These items were recorded and timestamped along with data at various points throughout the network (state variables, NIU, etc..). This data, once collected and correlated, was then analyzed to determine latencies to within a 0.5 ms accuracy.

3.5.1.6 VR-Link/Ethernet Interface

The VR-Link/Ethernet interface used one Silicon Graphics computer processor for each simulator as an interface (NIU) to the DIS network. Data was sent between the Encore computer and the SG processor over SCRAMNet. The two Challenge processors exchanged PDUs with other simulation entities via Ethernet.

Each simulation frame on the Encore computers was composed of the following actions:

- 1. Read SCRAMNet, which contained information about the other site's entities.
- 2. Run the generic F-15-like model.
- 3. Send data to its out-the-window display.
- 4. Send updated state information to the NIU processor.
- 5. Record data for post-run analysis.

The NIU processor was suspended until it received state information from the Encore simulator. The NIU processor would then:

- 1. Use the information to update the true state of the entity.
- 2. Dead reckon the aircraft position.

- 3. Compare the difference between the truth data and the dead reckoned data with the thresholds.
- 4. Send an entity state PDU if necessary.
- 5. Read all incoming PDUs.
- 6. Dead Reckon remote entities.
- 7. Write dead-reckoned state information of remote entities into SCRAMNet.

The dead reckoning, threshold comparison, and PDU sending were handled by the VR-Link software.

3.5.2 Common Testbed Architectural Pieces

All three architectures had three identical pieces among them: the Long-Haul Network Simulator, Network Loading and SCRAMNet timing connections. The Long-Haul Network Simulator was used to simulate the long-haul network connection between the two sets of UTD LANs being tested. This piece simulated a long-haul network link by delaying packets sent between the LANs. Network Loading was used to add network traffic to the network. This piece allows evaluation of effects of heavy traffic on the simulation. The SCRAMNet timing connections were used to control timing and synchronization. This piece controlled timing and synchronization by simulating a GPS connection to each machine.

3.5.2.1 Long-Haul Network Simulator

The long-haul network was simulated using a Silicon Graphics computer connected to the main WAN backbone of all three architectures. This computer simulated network delays modeled after that used in [SWAINE95]. The SG computer generated pseudo-random delay times which had a Gaussian distribution. DIS packets going from one LAN to another were delayed by these random delay times. The mean and standard deviation of the delay times were controlled by a configuration file and were set for 45 ms and 10 ms, respectively (determined from [ZEH95]).

3.5.2.2 Network Loading

Original plans called for a central computer on the main backbone to act as a network loader. Instead, a more realistic loading scheme was devised. Loading was based on increasing digital entity performance characteristics. This effect was more realistic than backbone loading due to the assumptions involved with the NETS networking setup. NETS assumed the two training squadrons would most likely have a simple dedicated line to connect one another instead of a large, shared network connection. In the event of the later, backbone loading would be appropriate since there would be extra traffic on the backbone not related to the training squadrons in question. However, if a direct connection were to be used - which is the more likely, cheaper route - then loading would be a function of increased traffic deriving from the LANs. The best way to simulate that effect was to increase output from the digital players. Furthermore, it was discovered during developmental testing, that all six digital entities performing a high-G maneuver (designed to get into position to fire a missile), would saturate both the SNAP computer and the SG 200 MHz R4400 processors. This point was used as the maximum, saturation case, and stepped backwards to get lesser loading levels.

The low loading level had each digital player, as a base case, fly straight and level. The second loading level had one digital player on each LAN perform the high G maneuver designed to get into position to fire a missile. The third loading level had two digital players on each LAN performing this high G maneuver. The fourth loading level had all three digital players on each LAN performing the same high G maneuver.

3.5.2.3 SCRAMNet Timing Connections

Each system in the NETS setup had a SCRAMNet interface card, a commercial off-the-shelf interface card developed by SYSTRAN Corp. located in Dayton, OH. SCRAMNet, developed through a SBIR several years back, has become a leading industry mechanism for high-speed shared memory applications. SCRAMNet was the only logical choice for an alternative network due to its ease of use and high performance. SCRAMNet has a bandwidth of 150 Mbit/s, which is 15 times greater than Ethernet, which has a bandwidth of 10 Mbit/s. SCRAMNet is used by all three networks under investigation to control timing and synchronization (simulating a GPS connection). The simulation time for each computer is synchronized at the start of each frame. Inter-frame timing is accomplished by distributed time available on the computers (described in Section 3.6.7 - Distributed Time). This allows for the use of absolute timestamping in the DIS PDUs, which has been shown to significantly increase positional accuracy [SWAINE95]. Absolute timestamping is used in all test runs.

3.5.3 Testbed Architecture Implementation

The following sections discuss the implementation of the previously mentioned architectures using the testbed hardware available to AFRL/VACS.

Delay LAN #1 (WAN)-LAN #2 (WAN)-Network Loader Pioted Digital Digital Digital **Piloted** Digital Digital Digital Sim NIU NIU Sim NIU Sim NIU NIU Sim NIU Sim NIU Sim NIU Scram Scram` **Net #1** Net #2 60 Hz C-IV Interrupt (m) Real-Time Simulation Real-Time Simulation Computer Computer

3.5.3.1 Simple Ethernet Architecture

Figure 7 - Simple Ethernet Architecture - Conceptual

The Simple Ethernet Architecture conceptual diagram is shown in Figure 7, and the connection diagram is shown in Figure 8. The two Encore computers ran the piloted simulations and were connected to the Ethernet network through SG16 processors acting as an NIU (labeled 'Piloted' in Figure 7). SG16 connected to LAN #1 on port 3000 with Multicast address of 224.0.0.10 and used the ep0 interface to receive and the ep1 interface to send. Ep0 and ep1 were two Ethernet interfaces on an eight port E-plex card located inside SG16. SG 16 also connected to LAN #2 on port 3001 with Multicast address of 225.0.0.20 and used the ep3

interface to receive and the ep4 interface to send. SCRAMNet was used to control timing and synchronization of the Silicon Graphics computers, as well as for communication between the Encores and the NIU. The two LANs were implemented by using 10BaseT Hubs. SG16 implemented the network delay function using one processor which was connected to each hub, and implemented all three digital entities on a LAN using one processor (two processors total to simulate all six digital entities in the entire architecture).

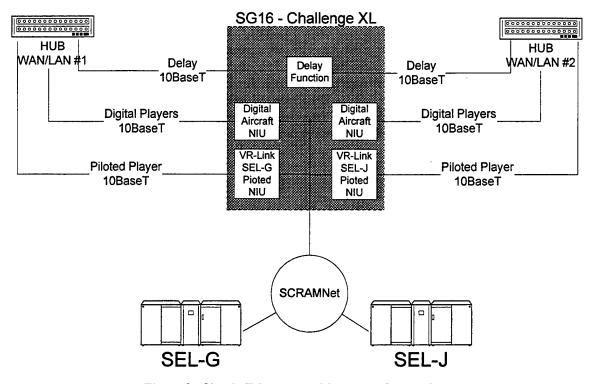


Figure 8 - Simple Ethernet Architecture - Connection

SNAP was configured to record Ethernet packets on each LAN, record state variable information in each piloted simulation (via SCRAMNet), provide stick input to one piloted simulation, and measure OTW display changes on the other piloted simulation.

3.5.3.2 Ethernet with Gateways Architecture

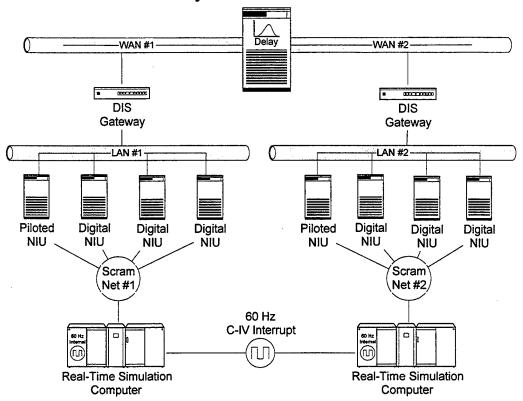


Figure 9 - Ethernet with Gateways Architecture - Conceptual

The Ethernet with Gateways Architecture conceptual diagram is shown in Figure 9, and the connection diagram is shown in Figure 10. The two Encore computers ran the piloted simulations and were connected to the Ethernet network through SG16 processors acting as an NIU. SG16 connected to LAN #1 on port 3000 with Multicast address of 224.0.0.10 and used the ep0 interface to receive and the ep1 interface to send. SG 16 also connected to LAN #2 on port 3001 with Multicast address of 225.0.0.20 and used the ep3 interface to receive and the ep4 interface to send. Each DIS Gateway was simulated by a processor on SG16. SG16 connected LAN #1 to the WAN Delay Simulator via WAN #1, using port 4000 with Multicast address of 224.0.0.11 and used the ep2 interface to receive and the ep6 interface to send. SG16 connected LAN #2 to the WAN Delay Simulator via WAN #2, using port 4001 with Multicast address of 225.0.0.21 and used the ep5 interface to receive and the ep7 interface to send. SCRAMNet was used to control timing and synchronization of the Silicon Graphics computers, as well as for communication between the Encores and the NIU. The four networks (2 LANs, and 2 WANs) were each implemented by using 10BaseT Hubs (one hub for one LAN & WAN). SG16 implemented the network delay function using one processor which was connected to both WAN hubs, and implemented all three digital entities on a LAN using one processor (two processors total to simulate all six digital entities in the entire architecture).

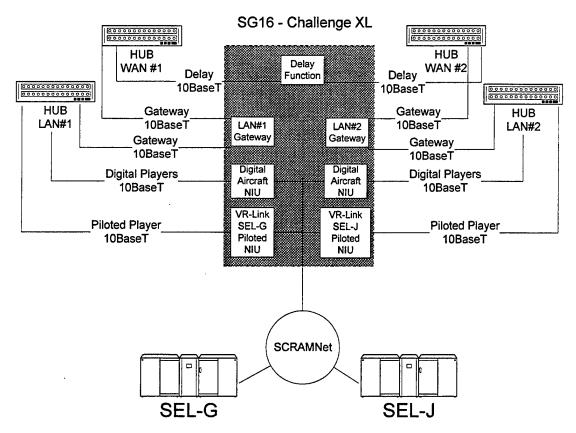


Figure 10 - Ethernet with Gateways Architecture - Connection

SNAP was configured to record Ethernet packets on each DIS Ethernet and each LAN, record state variable information in each piloted simulation (via SCRAMNet), provide stick input to one piloted simulation, and measure OTW display changes on the other piloted simulation.

3.5.3.3 SCRAMNet Architecture

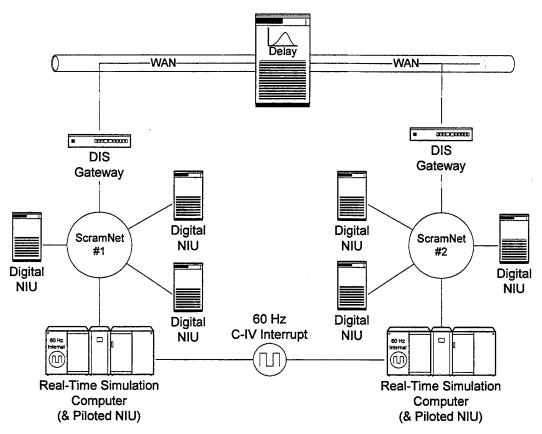


Figure 11 - SCRAMNet Architecture - Conceptual

The SCRAMNet Architecture conceptual diagram is shown in Figure 11, and the connection diagram is shown in Figure 12. The two Encore computers ran the piloted simulations and were connected to the SG16 processors acting as an NIU via SCRAMNet. SG16 connected LAN #1 (implemented with SCRAMNet #1) to the WAN Delay Simulator via WAN #1, using port 4000 with Multicast address of 224.0.0.11 and used the ep2 interface to receive and the ep6 interface to send. SG16 also connected LAN #2 (implemented with SCRAMNet #2) to the WAN Delay Simulator via WAN #2, using port 4001 with Multicast address of 225.0.0.21 and used the ep5 interface to receive and the ep7 interface to send. Each DIS Gateway was simulated by a processor on SG16. SCRAMNet was used to control timing and synchronization of the Silicon Graphics computers, as well as for communication between the Encores and the NIU. The two WANs were implemented by 10BaseT hubs. SG16 implemented the network delay function using one processor which connected to each WAN hub, and SG16 implemented all three digital entities on a LAN using one processor (two processors total to simulate all six digital entities in the entire architecture).

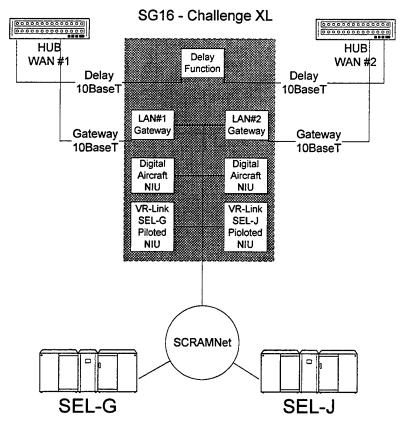


Figure 12 - SCRAMNet Architecture - Connection

SNAP was configured to record Ethernet packets on each DIS Ethernet, record state variable information in each piloted simulation (via SCRAMNet), provide stick input to one piloted simulation, and measure OTW display changes on the other piloted simulation.

3.6 Step 3: Design and Create Networking/Architecture/Simulation Software

Numerous pieces of code were designed and developed for the NETS program. Each piece of software developed is listed here and described in the following sections:

- SEL-J Simulation
- SEL-G Simulation
- Digital Aircraft
- DIS Interface for Piloted Players
- WAN Simulator
- DIS Gateway
- Distributed Time
- DIS Protocol
- DIS-Lite Protocol
- SCRAMNet Interface
- Architecture Program Integration and Scheduling

3.6.1 Sel-J Simulation

The Sel-J simulation was a standard AFRL/VACS simulation using version 6.0 of the executive. It simulated a piloted player controlled from a PCS and had a SCRAMNet interface to a DIS Interface program. This simulation used a SCRAMNet partition starting at a 256K offset. Modifications were made to the executive to initialize SCRAMNet and to send interrupts to Sel-G and SG16 each time the real-time task was resumed. An interrupt was also sent to SNAP near the end of the frame.

3.6.2 Sel-G Simulation

The Sel-G simulation was a standard AFRL/VACS simulation using version 7.0 of the executive. Changes in version 7.0 had no effect on executive functions used in NETS. It simulated a piloted player controlled from a PCS and had a SCRAMNet interface to a DIS Interface program. This simulation used a SCRAMNet partition starting at a 384K offset. Modifications were made to the executive to allow it to use the Sel-J to Sel-G interrupt as the timing interrupt instead of the regular RTOM or C-IV timing interrupt. This was done so that the Sel-J and Sel-G simulations would be synchronized and have the same simulation time during each frame. The purpose of this interrupt was to simulate having a GPS-driven synchronization interrupt on each side.

3.6.3 Digital Aircraft

The digital aircraft simulated a piloted player by updating their state and using the VR-Link TopoOutbound class to send entity state PDUs. The digital aircraft could fly either straight and level, or a high-G turning pattern by reading a flight path in a file. This program did not read in any PDUs. This program ran synchronous with the piloted simulator that is on its LAN by use of a flag in SCRAMNet memory. Six aircraft were simulated using two processors on SG16 and the SG React Frame Scheduler.

3.6.4 DIS Interface for Piloted Players

The DIS Interface program was the piloted simulations interface to the DIS network. The piloted aircraft's state data was replicated into SCRAMNet memory and the DIS Interface then used that to update a VR-Link TopoOutbound class to send entity state PDUs. A VR-Link Remove Vehicle Approximator (RVA) class was used to filter and receive PDUs from other entities and their state data was filled into SCRAMNet for the piloted simulation to use. This program ran synchronous with the piloted simulator that was on its LAN by use of a flag in SCRAMNet.

3.6.5 WAN Simulator

This program simulated the delays of a Wide Area Network. It used a random Gaussian distribution to create the delay for the Ethernet frames between two networks (per [SWAINE95]). The mean and standard deviation were specified on the command line. The WAN simulator was also capable of creating extra entity state, fire, and detonate PDUs on both networks. This trafficgeneration feature was not used. Instead, loading was performed by digital aircraft maneuvers.

3.6.6 DIS Gateway

The DIS Gateway program acted as a buffer between the WAN and the LAN. It filtered out extraneous PDUs from filling up the LANs bandwidth and also broadcasted the LANs out going PDUs on the WAN. The PDU pass through rules were controlled in the configuration file. If no thresholds were used on the LAN, then the PDUs were put into a list of outbound entities and dead reckoned (to reduce WAN traffic loads). If thresholds were being used on the LAN, then the PDUs were passed directly through to the other side.

The gateway had two representations of each aircraft. The first was a VR-Link DraEntity object in a VR-Link RVA table that was updated each time a PDU was received. The second was a VR-Link Outbound object that was used to generate PDUs for a vehicle. The methods in the RVA table and DraEntity classes were overridden so that an Outbound object attached to the opposite interface that the RVA table was receiving from was associated with each DraEntity in the RVA table. Then the Outbound object would update its state and output a PDU either when VR-Link updated the DraEntity in the RVA table upon receipt of an entity state PDU or when the RVA table DraEntities were dead reckoned. The time when the Outbound object output a PDU depended upon the LAN thresholds and the direction of the data flow. If the LAN was using 3,1,5 thresholds, the LAN to WAN interface and WAN to LAN Outbound objects would output a PDU upon receipt of a PDU. If the LAN was using 0,0,0 thresholds, the LAN to WAN Outbound objects would output a PDU upon receipt of a PDU after thresholding. The WAN to LAN Outbound objects were forced to output a PDU every pass after dead reckoning the DraEntities in the RVA table and updating the Outbound objects to the current dead reckoned state

3.6.7 Distributed Time

In order to use absolute timestamps in the PDUs for NETS, a program was created on a separate SNAP computer that continually read GPS time and put the time into SCRAMNet. The update rate was 10 kHz, which gives the GPS time sent to all nodes on SCRAMNet a +/-0.1 ms accuracy. This allowed all computers on the system to read the same time subject to SCRAMNet ring transmission delays, which are in the nanosecond range.

3.6.8 DIS Protocol

The IEEE 1278.1 of the DIS protocol was integrated into the NETS testing architecture. The only PDU that was used was the Entity State, which fully describes a simulated entity.

3.6.9 DIS-Lite Protocol

DIS-Lite, which is being developed under a SBIR with the developers of VR-Link, was integrated into the NETS testing architecture.

3.6.10 SCRAMNet Interface

Table 1 shows the format of data that was shared in SCRAMNet.

Word	Туре	Data Description	Units
1	float	Sel-J on LAN #1 aircraft X position	ft
2	float	Sel-J on LAN #1 aircraft Y position	ft
3	float	Sel-J on LAN #1 aircraft Z position	ft
4	float	Sel-J on LAN #1 aircraft roll rate	rad/sec
5	float	Sel-J on LAN #1 aircraft roll angle	rad
6	float	LAN #1, digital #1 X position	ft
7	float	LAN #1, digital #1 Y position	ft
8	float	LAN #1, digital #1 Z position	ft
9	float	LAN #1, digital #2 X position	ft
10	float	LAN #1, digital #2 Y position	ft
11	float	LAN #1, digital #2 Z position	ft
12	float	LAN #1, digital #3 X position	ft
13	float	LAN #1, digital #3 Y position	ft
14	float	LAN #1, digital #3 Z position	ft
15	float	Sel-G aircraft X position as seen by Sel-J on LAN #1	ft
16	float	Sel-G aircraft Y position as seen by Sel-J on LAN #1	ft
17	float	Sel-G aircraft Z position as seen by Sel-J on LAN #1	ft
18	float	Sel-G aircraft roll rate as seen by Sel-J on LAN #1	rad/sec
19	float	Sel-G aircraft roll angle as seen by Sel-J on LAN #1	rad
20	float	Sel-G on LAN #2 aircraft X position	ft
21	float	Sel-G on LAN #2 aircraft Y position	ft
22	float	Sel-G on LAN #2 aircraft Z position	ft
23	float	Sel-G on LAN #2 aircraft roll rate	rad/sec
24	float	Sel-G on LAN #2 aircraft roll angle	rad
25	float	LAN #2, digital #1 X position	ft
26	float	LAN #2, digital #1 Y position	ft
27	float	LAN #2, digital #1 Z position	ft
28	float	LAN #2, digital #2 X position	ft
29	float	LAN #2, digital #2 Y position	ft
30	float	LAN #2, digital #2 Z position	ft
31	float	LAN #2, digital #3 X position	ft

Word	Туре	Data Description	Units
32	float	LAN #2, digital #3 Y position	ft
33	float	LAN #2, digital #3 Z position	ft
34	float	Sel-J aircraft X position as seen by Sel-G on	ft
		LAN #2	
35	float	Sel-J aircraft Y position as seen by Sel-G on	ft
		LAN #2	
36	float	Sel-J aircraft Z position as seen by Sel-G on	ft
		LAN #2	
37	float	Sel-J aircraft roll rate as seen by Sel-G on LAN	rad/sec
		#2	
38	float	Sel-J aircraft roll angle as seen by Sel-G on LAN	rad
		#2	
39,40	integer	Sel-J aircraft model is done	sec
41,42	integer	Sel-J starts writing aircraft data in SCRAMNet	sec
43,44	integer	Sel-J finishes writing aircraft data in SCRAMNet	sec
45,46	integer	LAN #1 NIU read aircraft data from Sel-J	sec
47,48	integer	LAN #1 NIU sends Sel-J aircraft PDUs on WAN	sec
49,50	integer	LAN #1 NIU receives PDUs from WAN	sec
51,52	integer	LAN #1 NIU writes data for Sel-J	sec
53,54	integer	Sel-J starts reading NIU data in SCRAMNet	sec
55,56	integer	Sel-J sets data about Sel-G's aircraft in memory	sec
57,58	integer	Sel-G aircraft model is done	sec
59,60	integer	Sel-G starts writing aircraft data in SCRAMNet	sec
61,62	integer	Sel-G finishes writing aircraft data in SCRAMNet	sec
63,64	integer	LAN #2 NIU reads aircraft data from Sel-G	sec
65,66	integer	LAN #2 NIU sends Sel-G aircraft PDUs on WAN	sec
67,68	integer	LAN #2 NIU receives PDUs from WAN	sec
69,70	integer	LAN #2 NIU writes data for Sel-G	sec
71,72	integer	Sel-G starts reading NIU data in SCRAMNet	sec
73,74	integer	Sel-G sets data about Sel-J's aircraft in memory	sec
75,76	integer	LAN #1 Gateway receives aircraft data from LAN	sec
		#1	
77,78	integer	LAN #1 Gateway sends PDUs on WAN	sec
79,80	integer	LAN #1 Gateway receives PDUs from WAN	sec
81,82	integer	LAN #1 Gateway send PDUs on LAN	sec
83,84	integer	LAN #2 Gateway receives aircraft data from LAN #2	sec
85,86	integer	LAN #2 Gateway sends PDUs on WAN	sec
87,88	integer	LAN #2 Gateway receives PDUs from WAN	sec
89,90	integer	LAN #2 Gateway send PDUs on LAN	sec

Table 1 - SCRAMNet Data Layout (32 bit words)

Note: Integer times are stored as two words. The first word is the number of seconds and the second word is the number of microseconds in the day from midnight using standard GPS time.

3.6.11 Architecture Program Integration and Scheduling

Each one of the architectures required the integration of the various bits of code described above. In addition, each simulation's task execution schedule list was developed. Both the integration and scheduling are described in the following three sections under the appropriate architecture's name.

- Simple Ethernet Architecture Programs/Schedule
- Ethernet with Gateways Architecture Programs/Schedule
- SCRAMNet Architecture Programs/Schedule

3.6.11.1 Simple Ethernet Architecture Programs/Schedule

The top of Table 2 lists each program that was run for the Simple Ethernet Architecture, the computer and CPU it was run on, and which network (WAN/LAN #1 or #2) it was connected to. There was one DIS Interface process for each piloted simulation. The digital players for each site were run in a single process that used 2 processors controlled by the SG Frame Scheduler. One processor ran the three digital players for LAN#1 and the other ran the digital players for LAN#2. The bottom part of Table 2 lists the scheduled tasks that were run in the two piloted simulations. For the end-to-end tests the stick inputs and display outputs were added to the schedule.

Program	Computer	LAN	CPU
Sel-J Sim	Sel-J	N/A	1
Sel-G Sim	Sel-G	N/A	1
DIS Interface	sg16	WAN/LAN#1	3
DIS Interface	sg16	WAN/LAN#2	4
Digital	sg16	WAN/LAN#1 or WAN/LAN#2	5,6
WAN Sim	sg16	WAN/LAN#1 & WAN/LAN#2	7

Sel Simulation Schedule for End-to-End Runs			
Name	Rate	Description	
CMACREAL	50 Hz	Read pilot or SNAP inputs	
READ DIS	50 Hz	Read data from SCRAMNet about remote entities	
CONTROLS	50 Hz	Process CMACREAL inputs	
ADV166	50 Hz	Aircraft model	
MCS_DISP	50 Hz	Send aircraft data to display	
SEND DIS	50 Hz	Write aircraft data in SCRAMNet for DIS Interface	
DCU	50 Hz	Data Capture Utility	
	Sel Sin	nulation Schedule for Non-Maneuvering Runs	
Name	Rate	Description	
READ DIS	50 Hz	Read data from SCRAMNet about remote entities	
ADV166	50 Hz	Aircraft model	
SEND DIS	50 Hz	Write aircraft data in SCRAMNet for DIS Interface	
DCU	50 Hz	Data Capture Utility	

Table 2 - Simple Ethernet Architecture Programs/Schedule

3.6.11.2 Ethernet with Gateways Architecture Programs/Schedule

Table 3 lists the same information as Table 2 with the addition of the two gateway processes that had connections to both the LANs and WANs.

Program	Computer	LAN	CPU
Sel-J Sim	Sel-J	N/A	1
Sel-G Sim	Sel-G	N/A	1
DIS Interface	sg16	LAN#1	3
DIS Interface	sg16	LAN#2	4
Digital	sg16	LAN#1 or LAN#2	5,6
WAN Sim	sg16	WAN#1 and WAN#2	7
Gateway	sg16	LAN#1 and WAN#1	1
Gateway	sg16	LAN#2 and WAN#2	2

	Sel Simulation Schedule for End-to-End Runs			
Name	Rate	Description		
CMACREAL	50 Hz	Read pilot or SNAP inputs		
READ DIS	50 Hz	Read data from SCRAMNet about remote entities		
CONTROLS	50 Hz	Process CMACREAL inputs		
ADV166	50 Hz	Aircraft model		
MCS_DISP	50 Hz	Send aircraft data to display		
SEND DIS	50 Hz	Write aircraft data in SCRAMNet for DIS Interface		
DCU	50 Hz	Data Capture Utility		
	Sel Sir	nulation Schedule for Non-Maneuvering Runs		
Name	Rate	Description		
READ DIS	50 Hz	Read data from SCRAMNet about remote entities		
ADV166	50 Hz	Aircraft model		
SEND DIS	50 Hz	Write aircraft data in SCRAMNet for DIS Interface		
DCU	50 Hz	Data Capture Utility		

Table 3 - Ethernet with Gateways Architecture Programs/Schedule

3.6.11.3 SCRAMNet Architecture Programs/Schedule

Table 4 lists similar information as Table 3, with a few exceptions. The SCRAMNet Architecture didn't use the piloted DIS Interface Programs because the simulation wrote the data directly to SCRAMNet for the gateway to use. Likewise, the digital players wrote their data to SCRAMNet instead of sending PDUs. The gateway in this architecture read the local simulation data from SCRAMNet and performed the functions of an NIU for all the local aircraft by sending and receiving PDUs on the WAN. Data received from the WAN is dead-reckoned and was written into SCRAMNet for the local simulations to use.

Program	Computer	LAN	Partition	CPU
Sel-J Sim	Sel-J	N/A	1	1
Sel-G Sim	Sel-G	N/A	2	1
Digital	sg16	N/A	1,2	5,6
WAN Sim	sg16	WAN#1 and WAN#2	1,2	7
Gateway	sg16	WAN#1	1	1
Gateway	sg16	WAN#2	2	2

T	Cal	Simulation Schedule for End-to-End Runs			
Name	Rate	Description			
CMACREAL	50 Hz	Read pilot or SNAP inputs			
READ DIS	50 Hz	Read data from SCRAMNet about remote entities			
CONTROLS	50 Hz	Process CMACREAL inputs			
ADV166	50 Hz	Aircraft model			
MCS_DISP	50 Hz	Send aircraft data to display			
SEND DIS	50 Hz	Write aircraft data in SCRAMNet for DIS Interface			
DCU	50 Hz	Data Capture Utility			
	Sel Sin	nulation Schedule for Non-Maneuvering Runs			
Name	Rate	Description			
READ DIS	50 Hz	Read data from SCRAMNet about remote entities			
ADV166	50 Hz	Aircraft model			
SEND DIS	50 Hz	Write aircraft data in SCRAMNet for DIS Interface			
DCU	50 Hz	Data Capture Utility			

Table 4 - SCRAMNet Architecture Programs/Schedule

3.7 Step 4: Integrate SNAP into Testbed Architecture

SNAP was integrated into each of the three architectures. Table 5 shows the SNAP connections for the Simple Ethernet Architecture. For this architecture SNAP #1 was connected to LAN#1 via an Ethernet connection. No further Ethernet connections or SCRAMNet connections were made by this SNAP. SNAP #1 took its data on the Sel-J synchronization pulses. SNAP#2 was connected to LAN#2 via an Ethernet connection and was also connected to the SCRAMNet ring. Since there was only one real physical SCRAMNet ring that was logically split into two rings for the two LANs, SNAP#2 was able to record SCRAMNet simulator state data for all simulations on both LANs. SNAP#2 also took its data on the Sel-J synchronization pulses. SNAP#2 drove the stick for end-to-end tests, with SNAP#1 recording EVDAS.

Table 6 shows the SNAP connections for the Ethernet with Gateways Architecture. The SNAP setup was the same as the Simple Ethernet Architecture with the additions of SNAP#1 being connected to the network between the LAN#1 gateway and the WAN Network Simulator, and SNAP#2 being connected to the network between the LAN#2 gateway and the WAN Network Simulator.

Table 7 shows the SNAP connections for the SCRAMNet Architecture. The SNAP setup was the same as the Simple Ethernet Architecture with the exception that SNAP#1 was connected to the network between the LAN#1 (which was the SCRAMNet #1 ring) gateway and the WAN Network simulator, and that SNAP#2 was connected between the LAN#2 (SCRAMNet #2 ring) gateway and the WAN Network simulator.

		SNAP #	£1		
Ethernet #1	Ethernet #2	SCRAMNet	Interrupt	Stick Drive	EVDAS
LAN #1	N/A	no	Sel-J	N/A	yes
		SNAP #	2		
Ethernet #1	Ethernet #2	SCRAMNet	Interrupt	Stick Drive	EVDAS
LAN #2	N/A	yes	Sel-J	yes	N/A

Table 5 - Simple Ethernet Architecture SNAP Connections

		SNAP #	‡1		
Ethernet #1	Ethernet #2	SCRAMNet	Interrupt	Stick Drive	EVDAS
LAN #1	WAN#1	no	Sel-J	N/A	yes
		SNAP #	‡2		
Ethernet #1	Ethernet #2	SCRAMNet	Interrupt	Stick Drive	EVDAS
LAN #2	WAN#2	yes	Sel-J	yes	N/A

Table 6 - Ethernet with Gateways Architecture SNAP Connections

		SNAP #	‡1		
Ethernet #1	Ethernet #2	SCRAMNet	Interrupt	Stick Drive	EVDAS
WAN #1	N/A	no	Sel-J	N/A	yes
		SNAP #	‡ 2		
Ethernet #1	Ethernet #2	SCRAMNet	Interrupt	Stick Drive	EVDAS
WAN #2	N/A	yes	Sel-J	yes	N/A

Table 7 - SCRAMNet Architecture SNAP Connections

3.8 Step 5: Develop Test Scenario and Test Setup

While testing, the total end-to-end delay from one simulation to another was measured and the accuracy of the state of a remote entity was compared with its truth data.

SNAP was used to measure delays associated with the network traffic, stick inputs and outputs, and OTW displays. Code timing was accomplished by writing event times into SCRAMNet to be recorded by SNAP. Aircraft state data was recorded by the simulators and by SNAP via SCRAMNet.

The following sections discuss:

- Testing Variables and Parameters
- Architectural Delay Points
- DIS vs. DIS-Lite
- Delay Compensation
- Dead-Reckoning

3.8.1 Testing Variables and Parameters

One of the main variables during testing was the WAN network traffic. The network loading was varied by choosing four loading points [DORIS93]. Loading was accomplished by using one piloted and three digital players (on each LAN). The first loading level had all players flying straight and level. The second loading level had one digital player performing a high-G, high-PDU producing maneuver. The third loading level had two digital players performing the maneuver, and the third loading level had all three digital players performing the maneuver. Other parameters for testing included the three network architectures, DIS 2.0.4 and DIS-Lite protocols, delay compensation, and dead reckoning algorithm thresholds (varied for the local node testing).

Simulation Data Aircraft X Aircraft Y	SNAP Data PDUs leaving LAN1 PDUs arriving LAN2	Code Timings in SCRAMNet Start of frame to aircraft model done Time to package and send aircraft data to NIU
Aircraft Z	Stick	NIU LAN receive to NIU WAN transmit
Aircraft U	Network loading	NIU WAN receive to NIU LAN transmit
Aircraft V	Aircraft Position	Time to receive from NIU and set aircraft data
Aircraft W		Current WAN delay
Aircraft AX		Gateway performance timings
Aircraft AY		
Aircraft AZ		
Aircraft Phi		
Aircraft Theta		
Aircraft PSI		
Aircraft p		•
Aircraft q		
Aircraft r		

Table 8 - Data Recorded During Each Experiment

Table 8 summarizes the data that was recorded during each experiment. Aircraft data was collected to calculate errors and to determine when a new PDU arrived. A change in the remote aircraft's rate data for the current dead reckoning algorithm identified when a new PDU

arrived. SNAP recorded various types of data (PDUs, state variable, end-to-end, etc.) to determine network delay times. The code timings were recorded to determine the NIU and gateway performances (since these are software implemented).

In addition, the SNAP computer recorded the following data from SCRAMNet at a 320KB offset.

- Aircraft position, roll angle, and roll rate
- Other piloted aircraft's position
- Time when aircraft models finished on SELs
- Time when SELs write data into SCRAMNet for NIUs
- Time when NIUs start reading the data from the SELs
- Time when NIUs send PDU
- Time when NIUs finish receiving PDUs from the WAN/Gateway
- Time when NIUs write data into SCRAMNet for SELs
- Time when Gateways receive aircraft data from the LAN
- Time when Gateways send PDUs on the WAN
- Time when Gateways finish receiving PDUs from the WAN
- Time when Gateways send data on the LAN

Following is a discussion of the recordings made by each architecture:

- Simple Ethernet Architecture SEL/SNAP Recordings
- Ethernet with Gateways Architecture SEL/SNAP Recordings
- SCRAMNet Architecture SEL/SNAP Recordings

3.8.1.1 Simple Ethernet Architecture SEL/SNAP Recordings

Figure 13 displays the various data that each SNAP collected under each set of experiments for the first architecture. Note that EVDAS and SEL input data is collected during end-to-end testing, when a stick input is introduced from SNAP into the simulation, and the resulting visual effect is recording on the OTW display using EVDAS. Also, only one SNAP was used to collect SCRAMNet data since there was only one physical SCRAMNet ring - it was split virtually into two rings for the two LANs. Set one and two are the non-maneuvering case, and set three and four are the end-to-end case.

SNAP #1					
Set	PDUs	SCRAMNet	EVDAS	SEL Input	
1	yes	no	no	no	
2	yes	no	no	no	
3	yes	no	yes	yes	
4	yes	no	yes	yes	

Set	PDUs	SCRAMNet	EVDAS	SEL Input
1	yes	yes	no	no
2	yes	yes	no	no
3	yes	yes	yes	yes
4	yes	yes	yes	yes

Figure 13 - Simple Ethernet Architecture SEL/SNAP Recordings

3.8.1.2 Ethernet with Gateways Architecture SEL/SNAP Recordings

Figure 14 displays the various data that each SNAP collected under each set of experiments for the second architecture. The data collected is similar to that collected in the previous architecture. Set one and two are the non-maneuvering case, and set three and four are the end-to-end case.

Set	PDUs	SCRAMNet	EVDAS	SEL Input		
1	yes	no	no	no		
2	yes	no	no	no		
3	yes	no	yes	yes		
3	yes	no	yes	yes		

SNAP #2								
Set	PDUs	SCRAMNet	EVDAS	SEL Input				
1	yes	yes	no	no				
2	yes	yes	no	no				
3	yes	yes	yes	yes				
4	yes	yes	yes	yes				

Figure 14 - Ethernet with Gateways Architecture SEL/SNAP Recordings

3.8.1.3 SCRAMNet Architecture SEL/SNAP Recordings

Figure 15 displays the various data that each SNAP collected under each set of experiments for the second architecture. The data collected is similar to that collected in the previous architecture. Set one and two are the non-maneuvering case, and set three and four are the end-to-end case.

SNAP #1								
Set	PDUs	SCRAMNet	EVDAS	SEL Input				
1	yes	no	no	no				
2	yes	no	no	no				
3	yes	no	yes	yes				
4	yes	no	yes	yes				

SNAP #2							
Set	PDUs	SCRAMNet	EVDAS	SEL Input			
1	yes	yes	no	no			
2	yes	yes	no	no			
3	yes	yes	yes	yes			
4	yes	yes	yes	yes			

Figure 15 - SCRAMNet Architecture SEL/SNAP Recordings

3.8.2 Architectural Delay Points

Latency, or delays, are present at several different points in each architecture. These delay points include normal architectural delays such as memory moves, transmission delays, etc.. The delay points were measured during testing using code timings with the results being listed later in the report. Following are detailed descriptions of the possible delay points within each network configuration:

- Simple Ethernet Architecture
- Ethernet with Gateways Architecture
- SCRAMNet Architecture

3.8.2.1 Simple Ethernet Architecture Delays

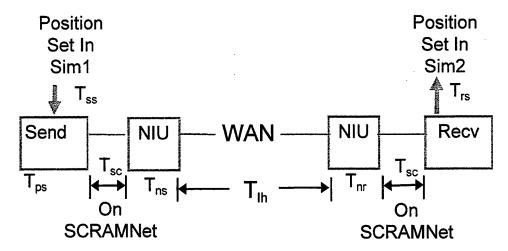


Figure 16 - Simple Ethernet Architecture Delays

Figure 16 shows a block diagram of the Simple Ethernet Architecture's delay measurement path. The sources of delay are:

 $T_{\rm ss}$ – the time between new data being written to memory and calling the code to send data to the NIU (depends on the simulation schedule),

 $T_{\rm ps}$ — the time taken to package the data and copy it into SCRAMNet memory. The Encore RSX can transfer data to SCRAMNet at a rate of 4 KB per ms, so the total time depends upon the amount of data transferred. The delay due to the transfer of data into SCRAMNet for this testing is essentially zero because of the minimum amount of data transferred.

 $T_{\rm sc}-\,$ transmission delay for SCRAMNet – essentially zero (a few ns) due to SCRAMNet's shared memory architecture.

 T_{ns} - the time taken to read and process the simulation data from SCRAMNet and transmit a PDU (depends on NIU implementation).

 T_{lh} — the time taken to traverse the long haul network. In this study, T_{lh} was simulated using a pseudo random time delay with a Gaussian distribution [SWAINE95] with an initial long haul mean delay of 45ms and a standard deviation of 10ms [ZEH95].

 T_{nr} – time taken to receive and process PDUs and send data to the receiving simulator.

 $T_{\rm rs}$ – the time it takes to read the SCRAMNet data, process it, and write the data into the simulation's memory.

A typical value for the sum of T_{ss} , T_{ps} , T_{sc} , and T_{ns} (the time from updated state to PDU transmission) can be estimated from [ZEH95] as 40ms. In a similar fashion, a typical value for the sum of T_{nr} and T_{rs} (receipt of PDU to update remote simulator's state in local simulator) can be estimated as 50ms. This time can vary as much as one simulation frame time-unit since T_{nr} is a sampling process dependent upon network loading (heavier loading may cause an additional frame). Also, for two simulators on the same LAN, T_{lh} can be assumed to be either 0 or 1 simulation frame time unit because of sampling uncertainty.

3.8.2.2 Ethernet with Gateways Architecture Delays

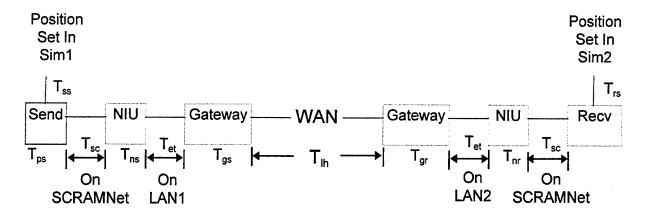


Figure 17 - Ethernet with Gateways Architecture Delays

Figure 17 shows a block diagram of the second architecture's delay measurement path. The additional delays incurred by this architecture over those in the first architecture (Figure 16) are two Ethernet transmissions on the LANs (T_{et}) and the delay from both gateways.

The two gateway delays, T_{gs} and T_{gr} , depend upon the gateway implementation, the network loading, and the synchronization between the gateway and simulation. (incurring an additional delay of 0 to 1 frame time unit due to sampling uncertainty).

The data path between two simulations on the same LAN for this architecture looks like the Simple Ethernet Architecture (Figure 16), with T_{lh} approximately equal to 0 since it is on a LAN. The LAN loading is assumed to be sufficiently low to make this approximation (since the gateway filters non-necessary packets).

3.8.2.3 SCRAMNet Architecture Delays

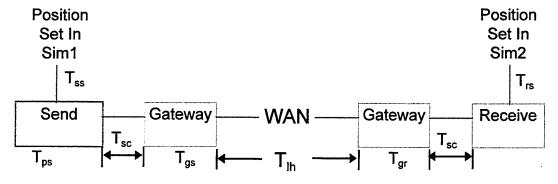


Figure 18 - SCRAMNet Architecture Delays

Figure 18 shows a block diagram of the third architecture's delay measurement path. This architecture removes the two LAN Ethernet transmission delays and the delay associated with the time to package the simulation data and send it by removing the NIU dedicated to the piloted player.

The data path between two local simulations for this architecture looks similar to those in Figure 17, but without the gateways or LAN. Therefore, the total local delay is a factor of the Encore write delay and SCRAMNet transmission - the total of which would be one simulation frame time due to scheduling of the SCRAMNet reads and writes of the simulations.

3.8.3 DIS vs. DIS-Lite

The goal of this block of tests (shown in Table 9) was to determine if DIS-Lite decreases the Ethernet bandwidth needed for a DIS exercise, to compare NIU and Gateway performance, and to ensure that the positional accuracy was preserved. The tests consisted of 4 sets, each set containing 4 experiments for the 4 network loads. The first 2 sets had the piloted player flying straight and level at a trim condition and no maneuvers. One set used DIS and the other DIS-Lite. These sets showed bandwidth usage differences between the 2 protocols for what should have been exactly the same PDU outputs. The next 2 sets measured the end-to-end delays by using SNAP to generate a step input in roll to one aircraft's stick and to measure the movement of that aircraft on the second aircraft's out-the-window display. Each aircraft flew at a trim condition.

Set	Description	Protocol	Piloted #1 Maneuver	Piloted #2 Maneuver
1	Non-maneuvering piloted	DIS	trim	trim
2	Non-maneuvering piloted	DIS-Lite	trim	trim
3	End to end	DIS	step input	trim
4	End to end	DIS-Lite	step input	trim

Table 9 - DIS vs. DIS-Lite Tests

3.8.4 Delay Compensation

The goal of this block of tests (shown in Table 10) was to determine if delay compensation techniques would allow us to improve simulation positional accuracy over the LAN and WAN. We know from [SWAINE95], that absolute timestamping is necessary. Utilizing absolute timestamping allowed delay compensation techniques to be used to update the position in a PDU that just arrived to the current time. Delay compensation was performed on the Silicon Graphics computers by dead reckoning the aircraft's position up to the current time plus one frame time to make up for the time it took for the data to get from the NIU to the Encore computers. The 4 sets of tests for the DIS vs. DIS-Lite testing were repeated utilizing delay compensation. The data from these two tests was used to determine if delay compensation improves simulation accuracies.

Set	Description	Protocol	Piloted #1 Maneuver	Piloted #2 Maneuver
1	Non-maneuvering piloted	DIS	trim	trim
2	Non-maneuvering piloted	DIS-Lite	trim	trim
3	End to end	DIS	step input	trim
4	End to end	DIS-Lite	step input	trim

Table 10 - Delay Compensation Tests

3.8.5 Dead Reckoning Thresholds

The goal of this block of tests (shown in Table 11) was to show what effect the dead reckoning thresholds have upon the positional accuracies and upon the NIU and Gateway performance. This block of tests repeated the tests performed in the first two testing blocks (DIS vs. DIS-Lite and Delay Compensation) but with different dead reckoning thresholds on the LAN. This block was only run on the two architectures that use Gateways because the local simulations shouldn't set their dead reckoning thresholds to 0 when directly attached to the DIS network IZEH951.

During the tests where the LAN dead reckoning thresholds were set to three degrees rotational, one meter translational, and five seconds (3,1,5), the Gateway did not dead reckon the LAN traffic - PDUs were passed through to the WAN. Only WAN traffic was filtered. The gateway dead reckoned traffic in both directions during the (0,0,0) LAN threshold tests so that the traffic going onto the WAN had (3,1,5) thresholds and the traffic going onto the LAN sent an update each frame.

The tests from the first two blocks with the Gateway architectures had all the LAN dead reckoning thresholds, rotational, translation, and time, set to zero. Therefore, only the sets of test where the thresholds are set to 3,1,5 were run.

Set	Description	Protocol	Piloted #1 Maneuver	Piloted #2 Maneuver	Compensation	LAN Thresholds
1	Non- maneuvering	DIS	trim	trim	no	0,0,0
2	Non- maneuvering	DIS-Lite	trim	trim	no	0,0,0
3	Non- maneuvering	DIS	trim	trim	yes	0,0,0
4	Non- maneuvering	DIS-Lite	trim	trim	yes	0,0,0
5	End to end	DIS	step input	trim	no	0,0,0
6	End to end	DIS-Lite	step input	trim	no	0,0,0
7	End to end	DIS	step input	trim	yes	0,0,0
8	End to end	DIS-Lite	step input	trim	yes	0,0,0

Table 11 - Dead Reckoning Thresholds Tests

3.9 Step 6: Conduct Evaluation Test Runs

Numerous test runs were conducted to account for the different variables in question (architectures, protocols, thresholds, delay compensations, etc.). A type of code was developed using the SNAP computer data files to determine from the file name which test and what particular variables that data file was testing. Table 12 displays the key to that file name code. For example, the SNAP file named E142t3l contains the following information: Snap #1 recorded this file during end-to-end testing, the maximum loading case was being performed, the architecture being tested was the Ethernet with Gateways Architecture, the thresholds were set to 3-1-5, no delay compensation was in effect (due to the lack of the letter 'd'), and the DIS-Lite protocol was being used. For another example, the SNAP file named S111t0 contains the following information: SNAP#1 recorded this file (non end-to-end testing), there was no loading being performed, the Simple Ethernet Architecture was

being tested, the thresholds were set to 0-0-0, and the lack of any 'd' or 'l' indicate that there was no delay compensation in effect and the protocol being used was DIS 2.0.5.

File Name Portion	Notation	Meaning
SNAP Number	·S1	SNAP #1 - Local Testing
	S2	SNAP #2 - Local Testing
	E1	SNAP #1 - End-to-End Testing
	E2	SNAP #2 - End-to-End Testing
Loading	1	no load - all digital aircraft straight and level
	2	low load - one digital aircraft perform high-G turn
	3	medium load - two digital aircraft perform high-G turn
	4	high load - three digital aircraft perform high-G turn
Architecture	1	Simple Ethernet Architecture
	2	Ethernet with Gateways Architecture
	3	SCRAMNet Architecture
Threshold	tO	0,0,0
	t3	3,1,5
Delay Compensation	(nothing)	No Delay Compensation
	ď	Delay Compensation on
DIS Lite	(nothing)	DIS 2.0.5 Protocol Used
	1	DIS-Lite Protocol Used

Table 12 - SNAP Test Filename Legend

Table 13 displays all the tests for the NETS program. The table shows the test run number, the date performed, the SNAP test file name (which can be decoded by using Table 12), the simulation test file names (recording code timings, aircraft state data, and accuracy data), the loading performed, the architecture being tested, the threshold conditions, the delay compensation status and the protocol being used. Note that most of this information can be derived from the SNAP test file name, and that the tests were run over a period of 4 days. Also note that Test number 24 has no simulation test file. This is due to the fact that SNAP couldn't handle the data load for this particular test - despite repeated attempts.

		SNAP Test	Sim Test				Delay	
Test	Date	File Name	File Name	Load	Architecture	Threshold	Comp	Protocol
1	12-May	SN11t3.dat	J12May.001/G12May.001	1	Ethernet	3,1,5	No Comp	DIS 2.0.5
2	12-May	SN21t3.dat	J12May.003/G12May.003	2	Ethernet	3,1,5	No Comp	DIS 2.0.5
3	12-May	SN31t3.dat	J12May.002/G12May.002	3	Ethernet	3,1,5	No Comp	DIS 2.0.5
4	12-May	SN41t3.dat	J12May.004/G12May.004	4	Ethernet	3,1,5	No Comp	DIS 2.0.5
5	12-May	SN11t3l.dat	J12May.005/G12May.005	1	Ethernet	3,1,5	No Comp	DIS-Lite
6	12-May	SN21t3l.dat	J12May.006/G12May.006	2	Ethernet	3,1,5	No Comp	DIS-Lite
7	12-May	SN31t3l.dat	J12May.007/G12May.007	3	Ethernet	3,1,5	No Comp	DIS-Lite
8	12-May	SN41t3l.dat	J12May.008/G12May.008	4	Ethernet	3,1,5	No Comp	DIS-Lite
9	12-May	SN11t3d.dat	J12May.013/G12May.013	1	Ethernet	3,1,5	Delay Comp	DIS 2.0.5
10	12-May	SN21t3d.dat	J12May.014/G12May.014	2	Ethernet	3,1,5	Delay Comp	DIS 2.0.5
11	12-May	SN31t3d.dat	J12May.015/G12May.015	3	Ethernet	3,1,5	Delay Comp	DIS 2.0.5
12	12-May	SN41t3d.dat	J12May.016/G12May.016	4	Ethernet	3,1,5	Delay Comp	DIS 2.0.5
13	12-May	SN11t3dl.dat	J12May.009/G12May.009	1	Ethernet	3,1,5	Delay Comp	DIS-Lite
14	•	SN21t3dl.dat	J12May.010/G12May.010	2	Ethernet	3,1,5 3,1,5	Delay Comp	DIS-Lite
15	12-May 12-May	SN31t3dl.dat		3			• •	DIS-Lite
			J12May.011/G12May.011		Ethernet	3,1,5	Delay Comp Delay Comp	
16	12-May	SN41t3dl.dat	J12May.012/G12May.012	4	Ethernet	3,1,5		DIS-Lite
17	14-May	SN12t0.dat	J14May.001/G14May.001	1	Ether w/ Gate	0,0,0	No Comp	DIS 2.0.5
18	14-May	SN22t0.dat	J14May.002/G14May.002	2	Ether w/ Gate	0,0,0	No Comp	DIS 2.0.5
19	14-May	SN32t0.dat	J14May.003/G14May.003	3	Ether w/ Gate	0,0,0	No Comp	DIS 2.0.5
20	14-May	SN42t0.dat	J14May.004/G14May.004	4	Ether w/ Gate	0,0,0	No Comp	DIS 2.0.5
21	14-May	SN12t0l.dat	J14May.005/G14May.005	1	Ether w/ Gate	0,0,0	No Comp	DIS-Lite
22	14-May	SN22t0l.dat	J14May.006/G14May.006	2	Ether w/ Gate	0,0,0	No Comp	DIS-Lite
23	14-May	SN32t0l.dat	J14May.007/G14May.007	3	Ether w/ Gate	0,0,0	No Comp	DIS-Lite
24	14-May	SN42t0l.dat	**N/A**	4	Ether w/ Gate	0,0,0	No Comp	DIS-Lite
25	14-May	SN12t0d.dat	J14May.008/G14May.008	1	Ether w/ Gate	0,0,0	Delay Comp	DIS 2.0.5
26	14-May	SN22t0d.dat	J14May.009/G14May.009	2	Ether w/ Gate	0,0,0	Delay Comp	DIS 2.0.5
27	14-May	SN32t0d.dat	J14May.010/G14May.010	3	Ether w/ Gate	0,0,0	Delay Comp	DIS 2.0.5
	14-May	SN42t0d.dat	J14May.011/G14May.011	4	Ether w/ Gate	0,0,0	Delay Comp	DIS 2.0.5
29	14-May	SN12t0dl.dat	J14May.012/G14May.012	1	Ether w/ Gate	0,0,0	Delay Comp	DIS-Lite
30	14-May	SN22t0dl.dat	J14May.013/G14May.013	2	Ether w/ Gate	0,0,0	Delay Comp	DIS-Lite
31	14-May	SN32t0dl.dat	J14May.014/G14May.014	3	Ether w/ Gate	0,0,0	Delay Comp	DIS-Lite
32	14-May	SN42t0dl.dat	J14May.015/G14May.015	4	Ether w/ Gate	0,0,0	Delay Comp	DIS-Lite
33	14-May	SN12t3.dat	J14May.024/G14May.024	1	Ether w/ Gate	3,1,5	No Comp	DIS 2.0.5
34	14-May	SN22t3.dat	J14May.025/G14May.025	2	Ether w/ Gate	3,1,5	No Comp	DIS 2.0.5
35	14-May	SN32t3.dat	J14May.026/G14May.026	3	Ether w/ Gate	3,1,5	No Comp	DIS 2.0.5
36	14-May	SN42t3.dat	J14May.027/G14May.027	4	Ether w/ Gate	3,1,5	No Comp	DIS 2.0.5
37	14-May	SN12t3l.dat	J14May.028/G14May.028	1	Ether w/ Gate	3,1,5	No Comp	DIS-Lite
38	14-May	SN22t3l.dat	J14May.029/G14May.029	2	Ether w/ Gate	3,1,5	No Comp	DIS-Lite
39	14-May	SN32t3l.dat	J14May.030/G14May.030	3	Ether w/ Gate	3,1,5	No Comp	DIS-Lite
40	14-May	SN42t3l.dat	J14May.031/G14May.031	4	Ether w/ Gate	3,1,5	No Comp	DIS-Lite
41	14-May	SN13t3.dat	J14May.016/G14May.016	1	SCRAMNet	3,1,5	No Comp	DIS 2.0.5
42	14-May	SN23t3.dat	J14May.017/G14May.017	2	SCRAMNet	3,1,5	No Comp	DIS 2.0.5
43	14-May	SN33t3.dat	J14May.018/G14May.018	3	SCRAMNet	3,1,5	No Comp	DIS 2.0.5
44	14-May	SN43t3.dat	J14May.019/G14May.019	4	SCRAMNet	3,1,5	No Comp	DIS 2.0.5
45	14-May	SN13t3l.dat	J14May.020/G14May.020	1	SCRAMNet	3,1,5	No Comp	DIS-Lite
46	14-May	SN23t3l.dat	J14May.021/G14May.021	2	SCRAMNet	3,1,5	No Comp	DIS-Lite
47	14-May	SN33t3l.dat	J14May.022/G14May.022	3	SCRAMNet	3,1,5	No Comp	DIS-Lite
48	14-May	SN43t3l.dat	J14May.023/G14May.023	4	SCRAMNet	3,1,5	No Comp	DIS-Lite
49	15-May	EN11t3.dat	J15May.001/G15May.001	1	Ethernet	3,1,5	No Comp	DIS 2.0.5
50	15-May	EN21t3.dat	J15May.002/G15May.002	2	Ethernet	3,1,5	No Comp	DIS 2.0.5
51	15-May	EN31t3.dat	J15May.003/G15May.003	3	Ethernet	3,1,5	No Comp	DIS 2.0.5
52	15-May	EN41t3.dat	J15May.004/G15May.004	4	Ethernet	3,1,5	No Comp	DIS 2.0.5
53	15-May	EN11t3l.dat	J15May.006/G15May.006	1	Ethernet	3,1,5	No Comp	DIS-Lite
54	15-May	EN21t3l.dat	J15May.007/G15May.007	2	Ethernet	3,1,5	No Comp	DIS-Lite
55	15-May	EN31t3l.dat	J15May.008/G15May.008	3	Ethernet	3,1,5	No Comp	DIS-Lite

56	15-May	EN41t3l.dat	J15May.009/G15May.009	4	Ethernet	3,1,5	No Comp	DIS-Lite
57	15-May	EN11t3d.dat	J15May.010/G15May.010	1	Ethernet	3,1,5	Delay Comp	DIS 2.0.5
58	15-May	EN21t3d.dat	J15May.011/G15May.011	2	Ethernet	3,1,5	Delay Comp	DIS 2.0.5
59	15-May	EN31t3d.dat	J15May.012/G15May.012	3	Ethernet	3,1,5	Delay Comp	DIS 2.0.5
60	15-May	EN41t3d.dat	J15May.013/G15May.013	4	Ethernet	3,1,5	Delay Comp	DIS 2.0.5
61	15-May	EN11t3dl.dat	J15May.014/G15May.014	1	Ethernet	3,1,5	Delay Comp	DIS-Lite
62	15-May	EN21t3dl.dat	J15May.015/G15May.015	2	Ethernet	3,1,5	Delay Comp	DIS-Lite
63	15-May	EN31t3dl.dat	J15May.016/G15May.016	3	Ethernet	3,1,5	Delay Comp	DIS-Lite
64	15-May	EN41t3dl.dat	J15May.017/G15May.017	4	Ethernet	3,1,5	Delay Comp	DIS-Lite
65	15-May	EN12t0.dat	J15May.018/G15May.018	1	Ether w/ Gate	0,0,0	No Comp	DIS 2.0.5
66	15-May	EN22t0.dat	J15May.019/G15May.019	2	Ether w/ Gate	0,0,0	No Comp	DIS 2.0.5
67	15-May	EN32t0.dat	J15May.020/G15May.020	3	Ether w/ Gate	0,0,0	No Comp	DIS 2.0.5
68	15-May	EN42t0.dat	J15May.021/G15May.021	4	Ether w/ Gate	0,0,0	No Comp	DIS 2.0.5
69	15-May	EN12t0l.dat	J15May.022/G15May.022	1	Ether w/ Gate	0,0,0	No Comp	DIS-Lite
70	15-May	EN22t0l.dat	J15May.023/G15May.023	2	Ether w/ Gate	0,0,0	No Comp	DIS-Lite
71	15-May	EN32t0l.dat	J15May.024/G15May.024	3	Ether w/ Gate	0,0,0	No Comp	DIS-Lite
72	15-May	EN42t0l.dat	J15May.025/G15May.025	4	Ether w/ Gate	0,0,0	No Comp	DIS-Lite
73	15-May	EN12t0d.dat	J15May.026/G15May.026	1	Ether w/ Gate	0,0,0	Delay Comp	DIS 2.0.5
74	15-May	EN22t0d.dat	J15May.027/G15May.027	2	Ether w/ Gate	0,0,0	Delay Comp	DIS 2.0.5
75	15-May	EN32t0d.dat	J15May.028/G15May.028	3	Ether w/ Gate	0,0,0	Delay Comp	DIS 2.0.5
76	15-May	EN42t0d.dat	J15May.029/G15May.029	4	Ether w/ Gate	0,0,0	Delay Comp	DIS 2.0.5
77	15-May	EN12t0dl.dat	J15May.030/G15May.030	1	Ether w/ Gate	0,0,0	Delay Comp	DIS-Lite
78	15-May	EN22t0dl.dat	J15May.031/G15May.031	2	Ether w/ Gate	0,0,0	Delay Comp	DIS-Lite
79	15-May	EN32t0dl.dat	J15May.032/G15May.032	3	Ether w/ Gate	0,0,0	Delay Comp	DIS-Lite
80	15-May	EN42t0dl.dat	J15May.033/G15May.033	4	Ether w/ Gate	0,0,0	Delay Comp	DIS-Lite
81	15-May	EN13t3.dat	J15May.034/G15May.034	1	SCRAMNet	3,1,5	No Comp	DIS 2.0.5
82	15-May	EN23t3.dat	J15May.035/G15May.035	2	SCRAMNet	3,1,5	No Comp	DIS 2.0.5
83	15-May	EN33t3.dat	J15May.036/G15May.036	3	SCRAMNet	3,1,5	No Comp	DIS 2.0.5
84	15-May	EN43t3.dat	J15May.037/G15May.037	4	SCRAMNet	3,1,5	No Comp	DIS 2.0.5
85	15-May	EN13t3l.dat	J15May.038/G15May.038	1	SCRAMNet	3,1,5	No Comp	DIS-Lite
86	15-May	EN23t3l.dat	J15May.039/G15May.039	2	SCRAMNet	3,1,5	No Comp	DIS-Lite
87	15-May	EN33t3l.dat	J15May.040/G15May.040	3	SCRAMNet	3,1,5	No Comp	DIS-Lite
88	15-May	EN43t3l.dat	J15May.041/G15May.041	4	SCRAMNet	3,1,5	No Comp	DIS-Lite
89	16-May	EN11t0d.dat	J16May.001/G16May.001	1	Ethernet	0,0,0	Delay Comp	DIS 2.0.5
90	16-May	EN11t0dl.dat	J16May.002/G16May.002	1	Ethernet	0,0,0	Delay Comp	DIS-Lite
91	16-May	EN13t0.dat	J16May.003/G16May.003	1	SCRAMNet	0,0,0	No Comp	DIS 2.0.5
92	16-May	EN13t0l.dat	J16May.004/G16May.004	1	SCRAMNet	0,0,0	No Comp	DIS-Lite

Table 13 - NETS Test Runs

3.10 Step 7: Reduce Test Data and Analyze

Each test run resulted in megabytes worth of data, with over 2GB worth of data taken during the entire test phase. To manage this large amount of data, several PERL scripts were developed to reduce the data into a series of totals, averages, standard deviations, minimums, maximums, etc. The results of this data reduction are shown in Appendix A - Simulation Recorded Data. These reduced data files are also described in the appendix. This data is reduced further still (for readability) in the following sections. The following sections discuss:

- Simulation Test Results
 - Network Case
 - Simple Ethernet Architecture Data
 - Ethernet with Gateways Architecture Data
 - SCRAMNet Architecture Data
 - End-to-End Case
 - Simple Ethernet Architecture Data
 - Ethernet with Gateways Architecture Data
 - SCRAMNet Architecture Data
- Simulation Code Timings

3.10.1 Simulation Test Results

The following sections discuss the tables recording NETS simulation test data for all three architectures under normal operating conditions (network case) and under special end-to-end testing conditions. The special end-to-end conditions were the end-to-end tests with an introduced stick input and measurements of the OTW visual system changes.

3.10.1.1 Network Case - First Architecture (Simple Ethernet Architecture)

Table 14 shows the accuracy and network data for the Simple Ethernet Architecture (non end-to-end). No zero threshold tests were performed since simulations would not normally send all possible data at every simulation time frame across a Wide Area Network. Each run lasted ten seconds.

The first column displays the SNAP filename case number (the decoding was discussed earlier in Table 12).

The second and third columns show the accuracy data for both piloted simulators. The terms J and G stand for SEL-J and SEL-G (the simulation computers). This data (in feet) shows the positional error that one piloted simulator had when it recorded information from the other piloted simulator. Note that this data actually represents one simulator time frame, since the aircraft were going 646.41 ft/s (Mach 0.6), and the time frame is .002 sec, the possible error would be 12.92 ft. Note that while DIS and DIS-Lite produced very close accuracy values, the DIS values were slightly better than the DIS-Lite values. This is most likely due to the Dead Reckoning algorithms changing on the fly in DIS-Lite. Note also that the Delay Compensation values are a significant improvement over the standard accuracy values.

The next four columns show the accuracy data for a the piloted player's recording for four main digital player cases. The 'N/A' data points are for cases when there were no digital aircraft performing during that case. The first case is for digital aircraft flying straight and level that was on the same LAN. The next case was for a digital aircraft flying straight and level that was on a different LAN (i.e. through the WAN). The third case was for a digital aircraft performing the high-

G maneuver that was on the same LAN. The fourth case was for a digital aircraft performing the high-G maneuver that was on a different LAN (i.e. through the WAN). Note that the maneuvers were recordings, and thus produced the same results each time. The non-maneuvering digital aircraft velocity was 300ft/sec, and the maneuvering digital aircraft velocity ranged from a maximum of 841.45 ft/sec to a minimum of 426.93 ft/sec (averaging 564.03 ft/sec). This translates to errors of 6ft for the non-maneuvering aircraft, and errors ranging from 16.83 ft to 8.54 ft (average 11.28 ft). The Delay Compensation didn't work as well for some of the cross-LAN traffic. It was realized well after testing that the accelerations being sent by digital aircraft PDUs were body coordinate accelerations instead of inertial coordinates. This could reasonably cause greater accuracy errors, and greater errors for the Delay Compensation since it was dead-reckoning the wrong accelerations further into time. Also, due to the larger dead-reckoning errors, more PDUs might have been sent out. Asterisks (*) mark unexpected data - possibly due to the reason listed above, and/or due to the problems with the DIS-Lite Query Response PDU (a problem that MaK technologies has since fixed - see Lessons Learned).

The next two columns show the SNAP-recorded averages over the WAN, which for this case, effectively measures the WAN Network Simulator. The data confirms that the WAN Network Simulator, which was programmed to operate at a mean of 45ms and a Standard deviation of 10ms was operating within parameters. The extra few ms are due to overhead from typical sources such as the Operating System, Interfaces, Input/Output, etc.

The next two columns show the WAN Bandwidth in Kb/sec and the number of WAN packets that were sent. Note that these numbers increase with loading (as expected). It is interesting to note that even though the piloted player was in a trim condition, and the digital aircraft were performing a recorded maneuver, the different numbers of PDUs were released. The only possible solution that comes to mind might be GPS timestamping. The GPS timer was implemented in SCRAMNet and used two blocks due to its size. It is possible the right portion (least significant) was being changed during reads - which would trigger dead-reckoning time thresholds.

The next two columns show the DIS-Lite Bandwidth and packet count savings. Since DIS-Lite is designed to only send out information when updated - and only that information, then one might expect DIS-Lite to perform better than the DIS protocol. The percentages displayed generally confirm this statement. DIS-Lite typically sent out smaller packets (saving bandwidth), and fewer packets (reducing the packet count). Note that DIS-Lite saves more bandwidth as the network is more heavily loaded.

DIS-Lite Packet Savings	N/A	Ϋ́	A/Z	A/A	9.8%	6.7%	9.7%	17.5%	N/A	A/Z	A/Z	A/N	-15.6%	6.1%	14.0%	17.2%
DIS-Lite BW Savings	NA	A/X	A/N	N/A	23.6%	43.8%	44.3%	50.1%	N/A	A/N	A/N	A/N	9.5%	47.8%	50.2%	47.5%
Total # WAN Packets	41	1028	2005	3019	37	929	1810	2491	32	1022	2023	3014	37	096	1740	2497
Kb/s WAN BW	5.5	113.9	263.4	387.2	4.2	64.0	146.6	193.1	4.2	142.6	276.6	398.1	3.8	74.4	137.8	208.9
SNAP Net Stdev (ms)	11.3	9.7	10.7	10.0	12.2	10.6	12.3	12.3	10.5	10.6	6.6	10.2	9.5	15.4	10.0	10.0
LAN1 to LAN2 Network SNAP Net Delay Avg. (ms)	49.5	49.2	51.7	48.6	48.9	50.5	48.9	48.9	49.2	50.5	49.1	20.0	49.4	51.2	47.9	47.6
Digital on LAN2 data at piloted on LAN1 accuracy (ft) (maneuvering)	N/A	20.10	21.12	20.86	N/A	21.21	20.89	21.06	N/A	17.14	16.62	17.28	ΝΆ	17.18	16.87	16.91
Digital on LAN1 data at piloted on LAN1 accuracy (ft) (maneuvering)	N/A	14.55	15.42	15.90	N/A	15.06	15.45	16.01	N/A	17.15	17.08	17.22	ΑN	7.30	8.01	8.11
Digital on LAN2 data at piloted on LAN1 accuracy (ft) (non-maneuver)	5.72	5.74	5.74	N/A	23.80*	12.11	20.78*	N/A	0.25	0.17	0.16	N/A	17.82*	11.07*	23.79*	N/A
Digital on LAN1 data at piloted on LAN1 accuracy (ft) (non-maneuver)	5.76	5.74	5.75	N/A	5.80	5.79	5.83	N/A	0.24	0.17	0.16	N/A	0.18	0.19	0.19	N/A
Piloted J data at G's sim accuracy (ft)	12.49	12.54	12.55	12.54	12.74	12.79	12.74	12.41	1.10	1.15	1.14	1.17	1.23	1.51	1.31	1.29
Piloted G data at J's sim accuracy (ft)	12.89	12.90	12.86	12.90	13.09	13.10	13.11	12.85	1.00	1.01	1.02	1.00	1.29	1.55	1.23	1.23
Case	s111t3	s121t3	s131t3	s141t3	s111t3l	s121t3l	s131t3l	s141t3l	s111t3d	s121t3d	s131t3d	s141t3d	s111t3dl	s121t3dl	s131t3dl	s141t3dl

Table 14 - Simple Ethernet Architecture - Network Results

3.10.1.2 Network Case - Second Architecture (Ethernet with Gateways Architecture)

Table 15 shows the accuracy and network data for the Ethernet with Gateways Architecture (non end-to-end). The first seven columns and last four columns displayed are identical as those shown in Table 14. The eighth and ninth columns are similar to those in Table 14, except they also encompass the gateways. There are N/A values in these columns for the DIS-Lite cases due to the method used to implement the delay determinations. The NIU timestamp was put into an empty DIS field in the packet. This packet was dead-reckoned at the receiving gateway and the timestamp was pulled out and used by SNAP. Since DIS-Lite doesn't have any extra fields, this test couldn't be done with DIS-Lite packets. Refer to the code timing (Table 20) for NIU latencies during DIS-Lite. Many of the same comments and revelations mentioned in the previous architecture also apply to this one for these particular columns. This data series also contains the one case mentioned earlier where the loading overwhelmed the SNAP and SG machines.

The tenth and eleventh columns show, for a LAN (only one LAN's data is shown), the LAN Bandwidth in Kb/sec and the number of LAN packets that were sent. Note that these number increase with loading (as expected).

The next two columns show the DIS-Lite Bandwidth and packet count savings. Since DIS-Lite is designed to only send out information when updated - and only that information, then one might expect DIS-Lite to perform better than the DIS protocol. The percentages displayed generally confirm this statement. DIS-Lite typically sent out smaller packets (saving bandwidth), and fewer packets (reducing the packet count). These comparisons were done using recorded files, so the data sent on the network was the same. Note that DIS-Lite saves more bandwidth as the network is more heavily loaded. Also note that DIS-Lite does send out larger initial packets (Query Response PDU), than DIS, and since the tests were only conducted for the first 10 seconds of a simulation, the number of PDUs and Bandwidth savings is not as large as would be during a longer simulation.

While DIS-Lite savings were valid and reasonable over the LAN, the DIS-Lite bandwidth and packet savings data values over the WAN are problematic. However, the pattern of the data does indicate explanations of the high negative numbers. First, the worst numbers appear during the zero threshold tests. During these tests, packets were sent every frame (and not dead-reckoned) to the gateways. The gateways took this data and performed dead-reckoning. The gateways do not perform dead-reckoning when the thresholds were set to three. This combined with good DIS-Lite numbers on the LANs strongly indicates an implementation problem with the gateway when it dead-reckons. Note that even with the gateway implementation problems, DIS-Lite still performed significantly better with increased loads (a trend noticed in all DIS-Lite tests).

DIS-Lite Packet Savings	N N N N N N N N N N N N N N N N N N N	40.4% 6.2% 19.3% 16.7%	4 4 4 2 2 2 2	-724.4% -25.6% -10.4%	4 4 4 4 2 2 2 2 2	-1062.1% -29.2% -13.7% -1.3%
DIS-Lite BW Savings	A A A A	50.7% 41.5% 50.5% 49.2%	4 4 4 4 2 2 2 2	-332.8% 18.9% 45.1%	4 4 4 4 2 2 2 2 2	-45.0% 22.9% 32.2% 38.7%
Total # WAN Packets	57 947 1824 2467	34 888 1472 2054	45 926 1686 2481	371 1163 1861	29 921 1676 2429	337 1190 1906 2461
Kb/s WAN BW	7.5 130.0 261.0 338.5	3.7 76.0 129.1 172.1	5.8 113.4 221.8 299.0	25.1 92.0 121.8	4.0 128.9 220.4 328.1	5.8 99.4 149.5 201.2
DIS-Lite Packet Savings	A A A A A	43.6% 3.9% 12.5% 13.4%	Z Z Z Z	17.0% 11.2% 12.5%	4 4 4 4 7 2 2 2	19.1% 11.7% 12.0% 20.9%
DIS-Lite BW Savings	Y Y Y Y	53.8% 41.9% 44.9% 47.4%	4 4 4 4 2 2 2 2	46.5% 36.2% 54.2%	4 4 4 4 2 2 2 2	9.1% 45.0% 42.6% 47.8%
Total # LAN Packets	55 945 1882 2764	31 908 1647 2394	2020 2323 2641 2921	1676 2062 2312	2015 2328 2660 2957	1630 2056 2340 2338
Kb/s LAN BW	8 141.1 283.7 410.2	3.7 82.0 156.2 215.9	272.9 300.6 373.4 378.1	145.9 191.7 171.0	300.3 349.7 380.4 431.5	272.9 192.4 218.3 225.2
Net Stdev (ms)	16.0 14.5 33.1 25.0	4 4 4 4 2 2 2 2 2 2 2 2	22.0 17.8 16.8 16.8	4 4 4 4 2 2 2 2 2 2	12.5 13.9 15.9 15.9	4 4 4 4 2 2 2 2
LAN1 to LAN2 Network Delay (include gateway) Avq. (ms)	86.7 89.5 88.8 88.4	N N N N	90.1 86.4 85.7 85.7	A A A A	77.3 83.1 81.6 81.6	4 4 4 4 2 2 2 2
Digital on LANZ at piloted on LAN1 accuracy (ft)		N/A 27.42 27.34 27.88	N/A 27.21 27.42 27.57	N/A 27.42 26.54	N/A 25.44 25.33 25.34	N/A 23.64 23.26 23.10
Digital on LAN1 at piloted on LAN1 accuracy (ft) (maneuver)	N/A 15.01 15.74 16.10	N/A 14.87 15.61 16.15	N/A 15.68 15.88 15.93	N/A 15.61 16.43	N/A 8.06 8.02 8.00	N/A 6.98 8.16 8.32
Digital on LAN2 at piloted on LAN1 accuracy (ft) (non-maneuver)	5.72 5.75 5.83 N/A	35.68* 32.86* 18.54* N/A	5.67 5.58 5.74 N/A	32.87* 26.3* 32.79* N/A	0.24 0.45 0.45 N/A	29.60* 15.72* 15.61* N/A
Digital on LAN1 at piloted on LAN1 accuracy (ft) (non-maneuver)	5.79 5.77 5.83 N/A	8.79 5.81 5.77 N/A	5.92 5.92 N/A	5.94 5.94 N/A	0.07 0.07 0.07 N/A	0.12 0.08 0.22 N/A
Piloted J data at G's sim accuracy (ft)	12.28 12.44 12.70 12.48	12.74 12.74 12.82 12.76	12.32 12.29 12.48 12.97	12.62 12.62 12.89	1.22 1.40 1.22 1.35	1.11 0.92 1.61 1.35
Piloted G data at J's sim accuracy (ft)	1	13.10 13.09 12.89 13.16	12.62 12.68 12.82 12.80	13.12 12.96 12.79	1.06 1.23 1.08	1.30 0.76 1.06 1.28
Case	\$112t3 \$122t3 \$132t3 \$142t3	s112t3l s122t3l s132t3l s142t3l	\$112t0 \$122t0 \$132t0 \$142t0	s112t0l s122t0l s132t0l s142t0l	s112t0d s122t0d s132t0d s142t0d	s112t0dl s122t0dl s132t0dl s142t0dl

Table 15 - Ethernet with Gateways Architecture - Network Results

3.10.1.3 Network Case - Third Architecture (SCRAMNet Architecture)

Table 16 shows the accuracy and network data for the SCRAMNet Architecture (non end-to-end). The columns displayed are identical as those shown in Table 14. Many of the same comments and revelations listed in the previous architectures apply to this one as well. This architecture was especially good at accuracies for other local entities (.001 feet). This is due to the fact that local entities were sharing information with each other via SCRAMNet instead of via Ethernet PDUs. The SCRAMNet option is lower since there is no overhead in creating Ethernet packets, no overhead in creating DIS packets. SCRAMNet is simply a shared memory - so data is shared with other local entities by simply reading and writing to memory locations. The accuracies for entities across the network were higher since the overhead of Ethernet and DIS packets now comes into play.

The DIS-Lite results are good - resulting in a bandwidth savings of up to 60%.

The first case (s113t3) had a very large number (approx. 40 feet) for the accuracy rating of the digital aircraft across the network for the non-maneuvering case. This number should be much smaller - closer to the ones below in the same column (approx. 7 feet). This test data is considered an anomaly.

<u></u>	Packet	Savings	A/A	N/A	A/N	A/A	-2.9%	-1.6%	25.7%	26.5%
: :	DIS-LIE BW	Savings	ΑΝ	A/N	ΑN	N/A	59.8%	38.0%	53.1%	52.9%
# 	WAN #	Packets	35	910	1835	2779	36	925	1363	2043
7	WAN	BW	10.2	147.1	288.7	430.6	4.1	91.2	135.4	202.8
0	Net Stdev	(sw)	10.0	10.5	10.3	10.8	13.4	16.3	15.0	15.0
LAN1 to LAN2 Network	Net Delay	Avg. (ms)	51.5	47.9	48.1	49.1	47.2	48.9	48.5	48.5
Digital on LAN2 data at piloted	accuracy (ft)	(maneuvering)	A/A	20.00	19.98	20.04	A/N	20.24	20.38	20.27
Digital on LAN1 data at piloted	accuracy (ft)	(maneuvering)	N/A	13.56	13.44	13.39	A/N	13.41	13.44	13.43
Digital on LAN2 data at piloted	accuracy (ft)	(non-maneuver)	40.27*	7.08	96.9	N/A	15.02	11.85	25.59	N/A
Digital on LAN1 data at piloted	accuracy (ft)	(non-maneuver)	0.01	0.01	0.01	N/A	0.01	0.01	0.01	Y/Z
Piloted I data	at G's sim	accuracy (ft)	12.53	13.70	12.60	14.10	13.01	12.77	12.89	13.03
Piloted G data	at J's sim	accuracy (ft)	12.88	14.20	12.98	13.92		13.11	13.22	13.38
		Case	s113t3	s123t3	s133t3	s143t3	s113t3l	s123t3l	s133t3l	s143t3l

Table 16 - SCRAMNet Architecture - Network Results

3.10.1.4 End-to-End Case - First Architecture (Simple Ethernet Architecture)

Table 17 shows key network data from the end-to-end tests for the Simple Ethernet Architecture.

The first column displays the SNAP filename case number (the decoding of which was discussed earlier).

The second column displays the roll number. For each test, five separate roll inputs were provided by SNAP and performed by the simulation aircraft.

The next 2 columns display the end-to-end latency. The first end-to-end column (with DR, or Dead Reckoning) shows this end-to-end latency including the added delays caused by DR. This value was determined by taking the difference between the time of the change in the local state variable after the stick moved, to the resulting time of the change in the remote state variable (see Figure 19 - from number 1 to 3). Note that the remote site is only updated after the local side exceeds the DR threshold - which causes a packet to be sent to the other side. The second endto-end column (no DR) shows end-to-end latencies without the added delays from DR. This value was determined by taking the same remote state variable update time, but instead of subtracting off the time when the local variable first changed, the time where the acceleration value in the local variable matched the updated value on the remote side is taken. What this gives you is the local to remote state update time AFTER dead-reckoning is performed (see Figure 19 - from number 2 to 3). It is exactly the same end-to-end time that would be found if there were zero thresholds. This fact is verified by looking at some t0 cases in Table 17 (i.e. the first two files in the table). The end-to-end result matches in both columns in these files (example - 0.070 in both columns in the first file [ex11t0d]). The third file (ex11t3) illustrates the latency that DR contributes to the system 0.248 - 0.088 = 160ms. Note that the 'with DR' column has no data for DIS-Lite. The reason for this is that the accelerations were used to determine this end-to-end data (due to the fact that it was not being dead-reckoned). Since DIS sent this information out in every packet, it was used for these end-to-end tests. Since DIS-Lite only sends out needed information, the accelerations weren't sent out each time, and thus not allowing end-to-end tests during DIS-Lite.

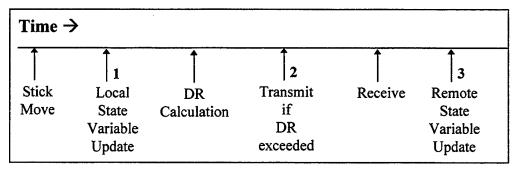


Figure 19 - End-to-End Case Data Points

Below each test run's listing, the average end-to-end values are shown for both DR and without DR. Below the entire listing of files, the 'no DR' column data is summarized as an average, maximum and minimum.

The next three columns display the SNAP time stamps used to derive the latency values in the previous two columns. These columns display the time stamps for when a local and remote

state variable changed. The first of the three is the time stamp for a local state variable change that includes Dead Reckoning. The second of the three is the time stamp for a local state variable change without Dead Reckoning. The last column is the time stamp for the remote variable change.

The results from the test runs on this architecture show that dead-reckoning serves as both a significant and variable delay point.

File	Roll#	with DR SV local to SV remote (seconds)	no DR SV local to SV remote (seconds)	DR Local SV (Z & AA) (seconds)	No DR Local SV (Z&AA) (seconds)	Remote SV (U & V) (seconds)
ex11t0d	1 2 3 4 5	0.060 0.060 0.070 0.080 0.080	0.060 0.060 0.070 0.080 0.080	55310.349 55312.130 55314.120 55316.111 55318.111	55310.349 55312.130 55314.120 55316.111 55318.111	55310.409 55312.190 55314.190 55316.191 55318.191
	Averages:	0.070	0.070			
ex11t0di	1 2 3 4 5 Averages:	0.082 0.080 0.080 0.080 0.080	0.082 0.080 0.080 0.080 0.080	57365.380 57367.383 57369.384 57371.384 57373.385	57365.380 57367.383 57369.384 57371.384 57373.385	57365.463 57367.463 57369.464 57371.464 57373.465
ex11t3	1 2 3 4 5 Averages:	0.500 0.220 0.080 0.220 0.220 0.220	0.100 0.100 0.080 0.080 0.080 0.080	62078.492 62080.492 62082.493 62084.493 62086.494	62078.892 62080.612 62082.493 62084.633 62086.634	62078.992 62080.712 62082.573 62084.713 62086.714
ex11t3d	1 2 3 4 5 Averages:	0.220 0.460 0.320 0.460 0.320 0.356	0.089 0.100 0.080 0.100 0.081	63387.489 63389.490 63391.490 63393.491 63395.491	63387.620 63389.850 63391.730 63393.851 63395.730	63387.710 63389.950 63391.811 63393.951 63395.812
ex11t3dl	1 2 3 4 5 Averages:	N/A N/A N/A N/A N/A	0.125 0.100 0.067 0.100 0.072	N/A N/A N/A N/A	63822.980 63825.926 63827.940 63829.947 63831.948	63823.106 63826.026 63828.007 63830.047 63832.020
ex11t3I	1 2 3 4 5 Averages:	N/A N/A N/A N/A N/A	0.080 0.085 0.080 0.100 0.100	N/A N/A N/A N/A	62637.135 62640.290 62642.136 62644.277 62646.297	62637.215 62640.376 62642.216 62644.377 62646.397
ex21t3	1	0.480	0.080	62170.868	62171.268	62171.348

	2 3 4 5 Averages:	0.211 0.070 0.420 0.320	0.091 0.110 0.090 0.060	62172.849 62174.849 62176.850 62178.850	62172.969 62174.809 62177.180 62179.110	62173.060 62174.919 62177.270 62179.170
	-			j		
ex21t3d	1 2 3 4 5	0.500 0.440 0.320 0.480 0.280	0.100 0.080 0.080 0.100 0.080	63531.580 63533.580 63535.581 63537.561 63539.562	63531.980 63533.940 63535.821 63537.941 63539.762	63532.080 63534.020 63535.901 63538.041 63539.842
	Averages:	0.404	0.088			
ex21t3dl	2 3 4 5	N/A N/A N/A N/A	0.097 0.083 0.080 0.084	N/A N/A N/A N/A	63945.943 63947.400 63949.884 63951.900	63946.040 63947.483 63949.964 63951.985
	Averages:	N/A	0.086			
ex21t3l	1 2	N/A N/A	0.080 0.100	N/A N/A	62758.664 62760.585	62758.744 62760.684
	3 4	N/A N/A	0.080 0.080	N/A N/A	62762.605 62764.566	62762.685 62764.646
	Averages:	N/A	0.085]		
ex31t3	1 2	0.360 0.480	0.100 0.080	62253.925 62255.925	62254.185 62256.325	62254.285 62256.405
	3 4 5	0.300 0.500 0.287	0.100 0.100 0.100	62257.926 62259.926 62261.920	62258.126 62260.326 62262.107	62258.226 62260.426 62262.207
	Averages:	0.385	0.096]		
ex31t3d	1 2	0.072 0.440	0.072 0.080	63613.328 63615.329	63613.328 63615.689	63613.400 63615.769
	3 4 5	0.460 0.320 0.460	0.100 0.080 0.080	63617.329 63619.330 63621.330	63617.689 63619.570 63621.710	63617.789 63619.650 63621.791
	Averages:	0.350	0.082]		
ex31t3dl	1 2	N/A N/A	0.055 0.080	N/A N/A	64037.195 64039.136	64037.250 64039.216
	3 4	N/A N/A	0.086 0.100	N/A N/A	64040.090 64043.117	64040.176 64043.217
	Averages:	N/A	0.080]		
ex31t3l	1 2	N/A N/A	0.080 0.074	N/A N/A	63065.916 63067.816	63065.996 63067.890
	3 4	N/A N/A	0.080 0.100	N/A N/A	63069.096 63071.837	63069.176 63071.937
	5 Averages:	N/A N/A	0.100	N/A]	63073.838	63073.938
ex41t3	1 2	0.460 0.020	0.060 0.080	62344.176 62346.176	62344.576 62346.116	62344.636 62346.196
	3	0.340	0.100	62348.177	62348.417	62348.517

	4	0.413	0.073	62350.177	62350.517	62350.590
	5	0.332	0.080	62352.178	62352.430	62352.510
	Averages:	0.313	0.079			
ex41t3d	1	0.500	0.100	63687.264	63687.664	63687.764
	2	0.220	0.100	63689.264	63689.384	63689.484
	3	0.080	0.080	63691.265	63691.265	63691.345
	4	0.200	0.105	63693.265	63693.360	63693.465
	5	0.080	0.080	63695.266	63695.266	63695.346
	Averages:	0.216	0.093			
ex41t3dl	1	N/A	0.100	N/A	64228.510	64228.610
	2	N/A	0.081	N/A	64231.470	64231.551
	3	N/A	0.080	N/A	64233.491	64233.571
	4	N/A	0.080	N/A	64235.472	64235.552
	5	N/A	0.098	N/A	64237.510	64237.608
	Averages:	N/A	0.088			
ex41t3l	2	N/A	0.080	N/A	63152.716	63152.796
	3	N/A	0.100	N/A	63154.136	63154.236
	4	N/A	0.100	N/A	63156.657	63156.757
	5	N/A	0.080	N/A	63158.677	63158.757
	Averages:	N/A	0.090			
	ALL-DIS Average:		0.086			
	Max:		0.125			
	Min:		0.055			

Table 17 - Simple Ethernet Architecture - End-to-End Results

3.10.1.5 End-to-End Case - Second Architecture (Ethernet with Gateways Architecture)

Table 18 shows key network data from the end-to-end tests for the Ethernet with Gateways Architecture.

The columns in Table 18 are the same as in Table 17.

By comparing this architecture's data to the previous architecture, it can be seen that this architecture tends to have higher latencies (both with and without DR) than the first architecture.

		with DR	no DR	DR No DR	
		SV local to	SV local to	Local SV Local SV R	emote SV
		SV remote	SV remote	(Z & AA) (Z&AA)	(U & V)
File	Roll#	(seconds)	(seconds)	(seconds) (seconds) (seconds)
ex12t0	1	0.103	0.120	64531.400 64531.383 6	4531.503
	2	0.500	0.140	64533.043 64533.403 6	4533.543
	3	0.340	0.120	64535.043 64535.264 6	4535.384
	4	0.260	0.120	64537.044 64537.184 6	4537.304
	5	0.244	0.120	64539.040 64539.165 6	4539.285
	Averages:	0.289	0.124		
ex12t0d	1	0.100	0.120	65891.966 65891.946 6	5892.066
CXTZ	2	0.460	0.140		5894.167
	3	0.440	0.140		5896.147
	4	0.440	0.140		5898.148
	5	0.440	0.120		5900.148
	Averages:	0.376	0.132		
ex12t0dl	1	N/A	0.157		1367.090
	2	N/A	0.076		1369.950
	3	N/A	0.116		1371.950
	4	N/A	0.125		1373.955
	5	N/A	0.100	N/A 71375.835 7	1375.936
	Averages:	N/A	0.115		
ex12t0l	1	N/A	0.120	N/A 65119.391 6	5119.511
	2	N/A	0.120	N/A 65121.391 6	5121.511
	3	N/A	0.137	N/A 65123.352 6	5123.488
	4	N/A	0.138	N/A 65125.352 6	5125.490
	Averages:	N/A	0.129		
ex22t0	1	0.239	0.119	64638.321 64638.441 6	4638.560
	2	0.162	0.140		4640.482
	3	0.320	0.140		4642.622
	4	0.480	0.140		4644.783
	5	0.380	0.120		4646.684
	Averages:	0.316	0.132		
	•	0.400		05000 054 05000 055	
ex22t0d	1	0.120	0.120		5970.374
	2	0.140	0.120		5972.394
	3	0.300	0.120	65974.255 65974.435 6	55974.555

	4	0.460	0.120	65976.255	65976.595	65976.715
	5	0.382	0.120	65978.254	65978.516	65978.636
	Averages:	0.280	0.120			
ex22t0dl	1	N/A	0.100	N/A	71466.484	71466.584
	2	N/A	0.100	N/A	71468.724	71468.824
	3	N/A	0.120	N/A	71471.145	71471.265
	4	N/A	0.120	N/A	71473.145	71473.265
	Averages:	N/A	0.110			
ex22t0l	1	N/A	0.140	N/A	65351.640	65351.780
	2	N/A	0.121	N/A	65354.100	65354.221
	3	N/A	0.141	N/A	65355.640	65355.781
•	4	N/A	0.140	N/A	65358.102	65358.242
	5	N/A	0.120	N/A	65360.102	65360.223
	Averages:	N/A	0.132			
	_					
ex32t0	1	0.100	0.120	64783.822	64783.802	64783.922
	2	0.320	0.120	64785.682	64785.882	64786.002
	3	0.540	0.140	64787.683	64788.083	64788.223
	4	0.320	0.120	64789.683	64789.883	64790.003
	5	0.540	0.140	64791.683	64792.084	64792.224
	Averages:	0.364	0.128			
ex32t0d	1	0.720	0.120	66131.729	66132.329	66132.449
	2	0.080	0.129	66133.729	66133.680	66133.809
	3	0.380	0.140	66135.730	66135.970	66136.110
	4	0.520	0.140	66137.730	66138.110	66138.250
	5	0.320 0.404	0.120	66139.731	66139.931	66140.051
	Averages:	0.404	0.130			
ex32t0dl	1	N/A	0.100	N/A	71555.339	71555.438
0,10=10=1	2	N/A	0.120	N/A	71557.639	71557.759
	3	N/A	0.120	N/A	71559.539	71559.659
	4	N/A	0.120	N/A	71561.560	71561.680
	5	N/A	0.120	N/A	71563.600	71563.721
	Averages:	N/A	0.116			
	_					
ex32t0l	1	N/A	0.100	N/A	65447.877	65447.977
CAUZIOI	2	N/A	0.100	N/A	65450.098	65450.198
	3	N/A	0.120	N/A	65452.098	65452.218
	4	N/A	0.120	N/A	65454.099	65454.219
	Averages:	N/A	0.110			
	J	L				
ov42t0	1	0.100	0.120	64940.274	64940.254	64940.374
ex42t0	2	0.460	0.120	64941.934	64942.270	64942.394
	3	0.364	0.124	64943.930	64944.194	64944.295
	3 4	0.460	0.100	64945.935	64946.295	64946.395
	4 5	0.460		64947.936	64948.176	64948.316
	ວ Averages:	0.353	0.140 0.117	04347.330	U4340.170	U+340.310
	Averages.	0.000	J. 1 11			
ex42t0d	1	0.098	0.118	66296.162	66296.142	66296.260

	2	0.463	0.140	66297.860	66298.183	66298.323
	3	0.400	0.123	66299.863	66300.140	66300.263
	4	0.460	0.140	66301.864	66302.184	66302.324
	5	0.220	0.116	66303.860	66303.964	66304.080
	Averages:	0.328	0.127			
ex42t0dl	1	N/A	0.100	N/A	74005.204	74005.304
	2	N/A	0.160	N/A	74007.024	74007.185
	3	N/A	0.140	N/A	74009.845	74009.985
	4	N/A	0.125	N/A	74011.440	74011.566
	Averages:	N/A	0.131			
	•		,	•		
ex42t0l	1	N/A	0.122	N/A	65537.180	65537.303
	2	N/A	0.140	N/A	65539.183	65539.323
	3	N/A	0.100	N/A	65541.104	65541.203
	4	N/A	0.100	N/A	65543.204	65543.304
	5	N/A	0.120	N/A	65545.205	65545.324
	Averages:	N/A	0.116			
	<u> </u>		0.400	•		
	Gateway Average:		0.123			
	Max:		0.160			
	Min:		0.076			
				3		

Table 18 - Ethernet with Gateways Architecture - End-to-End Results

3.10.1.6 End-to-End Case - Third Architecture (SCRAMNet Architecture)

Table 19 shows key network data from the end-to-end tests for the Simple Ethernet Architecture.

The columns in Table 19 are the same as in Table 17.

By comparing this architecture's data to the previous architectures, it can be seen that this architecture tends to have much lower latencies (both with and without DR) than both the first and second architectures.

		with DR	no DR	DR	No DR	
		SV local to	SV local to	Local SV	Local SV	Remote SV
		SV remote	SV remote	(Z & AA)	(Z&AA)	(U & V)
File	Roll#	(seconds)	(seconds)	(seconds)	(seconds)	(seconds)
ex13t0	1	0.060	0.060	57980.843	57980.843	57980.903
	2	0.060	0.060	57982.844	57982.844	57982.904
	3	0.080	0.080	57984.844	57984.844	57984.924
	4	0.080	0.080	57986.845	57986.845	57986.925
	5	0.085	0.085	57988.840	57988.840	57988.925
	Averages:	0.073	0.073			
ex13t0l	1	0.060	0.060	58211.493	58211.493	58211.553
	2	0.060	0.060	58213.313	58213.313	58213.373
	3	0.076	0.076	58215.294	58215.294	58215.370
	4	0.076	0.076	58217.294	58217.294	58217.370
	5	0.085	0.085	58219.290	58219.290	58219.375
	Averages:	0.071	0.071			
ex13t3	1	0.145	0.079	74823.500	74823.566	74823.645
	2	0.080	0.080	74825.326	74825.326	74825.406
	3	0.300	0.080	74827.327	74827.547	74827.627
	4	0.160	0.080	74829.327	74829.407	74829.487
	5	0.320	0.080	74831.328	74831.568	74831.648
	Averages:	0.201	0.080			
ex13t3l	1	N/A	0.100	N/A	75627.293	75627.393
	2	N/A	0.060	N/A	75630.634	75630.694
	3	N/A	0.080	N/A	75632.654	75632.734
	4	N/A	0.080	N/A	75634.595	75634.675
	5	N/A	0.080	N/A	75636.595	75636.675
	Averages:	N/A	0.080			
ex23t3	1	0.482	0.080	75093.780	75094.182	75094.262
ψ	2	0.320	0.100	75095.783	75096.003	75096.103
	3	0.140	0.080	75097.783	75097.843	75097.923
	4	0.320	0.100	75099.784	75100.004	75100.104
	5	0.160	0.080	75101.784	75101.864	75101.944
	Averages:	0.284	0.088	70101.704	70101.004	70101.044
ex23t3l	1	N/A	0.080	N/A	75732.695	75732.775
GAZJIJI	2	N/A	0.080	N/A	75736.195	75736.275
	4	1877	0.000	IN/A	10100.190	10130.210

	3	N/A	0.060	N/A	75738.116	75738.176
	4	N/A	0.080	N/A	75740.116	75740.196
	5	N/A	0.080	N/A	75742.097	75742.177
	Averages:	N/A	0.076]		
ex33t3	4	0.260	0.000	75040 444	75040 044	75240 074
exoolo	1		0.060	75312.114	75312.314	75312.374
	2	0.105	0.080	75314.110	75314.135	75314.215
	3	0.360	0.100	75316.115	75316.375	75316.475
	4	0.186	0.080	75318.110	75318.216	75318.296
	5	0.260	0.060	75320.116	75320.316	75320.376
	Averages:	0.234	0.076	1		
ex33t3l	1	N/A	0.072	N/A	75835.719	75835.790
	2	N/A	0.080	N/A	75838.719	75838.800
	4	N/A	0.080	N/A	75842.741	75842.820
	5	N/A	0.060	N/A	75844.701	75844.761
	Averages:	N/A	0.073]		
ex43t3	1	0.060	0.080	75421.751	75421.731	75421.811
0,400	2	0.319	0.079	75423.752	75423.992	75424.070
	3	0.160	0.080	75425.752	75425.832	75425.912
	4	0.278	0.078	75427.753	75427.953	75428.030
	5	0.120	0.073	75429.753	75429.790	75429.873
	Averages:	0.120	0.080]	15425.150	15425.015
ex43t3l	1	N/A	0.100	N/A	75942.079	75942.179
	2	N/A	0.080	N/A	75944.879	75944.959
	3	N/A	0.080	N/A	75946.800	75946.880
	4	N/A	0.100	N/A	75948.800	75948.900
	5	N/A	0.080	N/A	75950.781	75950.861
	Averages:	N/A	0.088	J		
	SCRAMNet Average:		0.079]		
	Max:		0.100			
	Min:	· · ·	0.060			

Table 19 - SCRAMNet Architecture - End-to-End Results

3.10.2 Code Timings

Table 20 shows the code timings for each architecture. The first eight columns display (respectively) the date, architecture being tested, test block, whether the test was end-to-end (E2E) or not (Non), delay compensation being used (Y or N), LAN threshold being used (note that in SCRAMNet architectures it will be the WAN threshold), protocol being tested, and the loading. The next columns display the code timings (explained and described in Step 5 - Develop Test Scenario and Test Setup). The column labeled 'NIU' is the average total time for the NIU to operate during each pass of the simulation. It contains Tnr and Tns with the code around those two operations. The second-to-last column shows the total of all the code timings with the standard 45ms long haul delay added.

The last column is an estimate of the total state variable to state variable delay times that correspond to the estimations in Step 5, but using numbers from the NETS experiment instead of estimates from [Zeh95]. The sampling uncertainty occurs anywhere there is an Ethernet interface receiving PDUs since the PDU receipt time will be one time frame later if it misses the PDU during the time frame it is output. A one-way PDU path in the Simple Ethernet Architecture or the SCRAMNet Architecture contains only one Ethernet reception at the NIU or the WAN side of the Gateway. The Ethernet with Gateways Architecture contains three Ethernet receptions, one at the LAN side of the Gateway, one at the WAN side of the Gateway, and one at the NIU. The average of the delays caused by sampling uncertainty (with a frame time of 20ms) is therefore 10ms for the Simple Ethernet Architecture or the SCRAMNet Architecture, and 30ms for the Ethernet with Gateways Architecture.

Note that several timings, including NIU and gateway times, increase with an increase in loading - which would be expected.

average time frame Total with sampling	Internation	NIU Tgs Tgr TIh=45ms uncertainty (me) (me) (me) of 0.4	(ciii) (ciii) (ciii)		1.520 NA NA 47.747 57.747	1.770 NA NA 47.609 57.609	2.323 NA NA 48.476 58.476		NA	1.600 NA NA 47.740 57.740	1.819 NA NA 48.016 58.016	0.968 NA NA 46.840 56.840	NA	1.605 NA NA 47.511 57.511	1.943 NA NA 47.777 57.777	0.959 NA NA 46.992 56.992		1.984 NA NA 48.209 58.209	2.252 NA NA 48.323 58.323	0.781 0.418	2.459 1.261 1.025 51.312 81.312	•	-	1.347 0.908 50.960	2.790 2.148 1.548 52.834 82.834	2.566 2.672 1.521 53.102 83.102		2.446 0.810 0.429 50.032 80.032	2.570 1.367 1.024 51.382 81.382	2.757 2.120 1.500 52.802 82.802	2.745 2.548 1.889 53.616 83.616	1.346 0.866 51.022		
		Trs (me)	(cills)	0.203	0.627	0.189	0.483	0.181	0.406	0.482	0.530	0.186	0.166	0.225	0.183	0.408	0.186	0.554	0.402	0.384	0.621	0.409	0.409	0.406	0.408	0.402		0.406	0.476	0.477	0.516	0.407	0.548	7070
		Tnr (ms)	(cm)	0.549	1.040	1.401	1.952	0.558	0.870	1.165	1.384	0.577	0.898	1.177	1.494	0.539	1.105	1.607	1.876	1.575	1.594	1.723	1.878	1.194	1.420	1.338		1.606	1.711	1.800	1.794	1.283	1.379	7
		Tns (me)	(ciii)	0.404	0.427	0.318	0.342	0.347	0.463	0.398	0.399	0.338	0.479	0.391	0.396	0.362	0.434	0.348	0.345	0.804	0.833	0.916	0.935	1.134	1.330	1.169		0.803	0.825	0.924	0.913	1.144	1.310	7
		Tss+Tps	(em)	0.703	0.653	0.701	0.699	0.762	0.703	0.695	0.703	0.739	0.698	0.718	0.704	0.683	0.680	0.700	0.700	0.976	0.978	0.981	0.985	0.971	0.980	1.000	(no data)	0.978	0.979	0.981	0.956	0.976	0.977	7
		Load		-	7	ဗ	4	-	7	က	4	_	7	က	4	-	7	က	4		7	က	4	-	7	က	4	- -	7	က	4	-	7	•
		Protocol		DIS				DIS-Lite				DIS-Lite				DIS				DIS				DIS-Lite				DIS				DIS-Lite		
NA		Thres.		3,1.5				3,1,5				3,1,5				3,1,5				0'0'0				0'0'0				0'0'0				0'0'0		
		ရ		z				z				>				>				z				z				>				>		
		Test		No.				Non				Non				Non				Non				Non				Son				Non		
		Block		DIS	vs.	DIS-Lite		DIS	,sv	DIS-Lite		DIS	vs.	DIS-Lite		DIS	vs.	DIS-Lite		DIS	vs.	DIS-Lite		DIS	vs.	DIS-Lite		Delay	Comp	(DC)		Delay	Comp	Ć
		Arch		Simple	Ethernet			Simple	Ethernet			Simple	Ethernet			Simple	Ethernet			14-May Ethernet	with	Gateways		Ethernet	with	Gateways		Ethernet	with	Gateways		Ethernet	with	
		Date		12-May Simple																14-May														

of 0-1	57.318	57.858	58.890	59.789	57.200	58.045	58.915	59.599	of 0-3	77.442	79.429	81.117	82.230	77.564	79.549	81.547	82.434	of 0-1	57.836	58.165	58.499	58.600	57.520	57.778	58.281	58.230	57.537	58.360	58.436	58.719	57.582	24.967	58.134	58.565	of 0-3	80.341	81.631	82.919	83.930	81.149	!
į	47.318	47.858	48.890	49.789	47.200	48.045	48.915	49.599		47.442	49.429	51.117	52.230	47.564	49.549	51.547	52.434		47.836	48.165	48.499	48.600	47.520	47.778	48.281	48.230	47.537	48.360	48.436	48.719	47.582	47.967	48.134	48.565		50.341	51.631	52.919	53.930	51.149	!
	0.460	0.740	1.176	1.492	0.378	0.683	0.936	1.276		0.317	1.019	1.526	1.268	0.317	1.143	1.956	1.775		¥	¥	¥	¥	¥	¥	¥	¥	¥	¥	¥	¥	¥	¥	¥	¥		0.409	0.989	1.479	1.981	0.712	
	0.339	0.749	1.192	1.696	0.503	0.980	1.394	1.945		-0.273	0.545	1.238	2.512	-0.246	0.736	1.648	2.566		¥	¥	¥	¥	¥	¥	¥	¥	¥	¥	¥	¥	¥	¥	Α̈́	¥		0.795	1.302	1.924	2.483	1.337	
	¥	Ϋ́	Š	¥	Ϋ́	Ϋ́	Ϋ́	Ϋ́		1.091	1.343	1.826	2.099	1.026	1.329	1.485	1.709		1.048	1.545	1.822	2.172	1.026	1.415	1.632	1.759	1.043	1.444	1.938	2.162	1.149	1.419	1.661	1.863		2.414	2.601	2.675	2.696	2.494	
	0.542	0.388	0.544	0.631	0.402	0.401	0.607	0.401		0.420	0.578	0.554	0.406	0.552	0.404	0.595	0.401		0.484	0.306	0.408	0.184	0.186	0.183	0.402	0.182	0.184	0.624	0.185	0.185	0.184	0.185	0.186	0.403		0.405	0.404	0.549	0.404	0.399)
	¥	¥	¥	¥	¥	¥	¥	¥		0.583	0.938	1.371	1.721	0.571	0.824	1.078	1.288		0.623	1.130	1.415	1.787	0.633	0.898	1.213	1.375	0.664	1.044	1.543	1.864	0.710	0.982	1.244	1.438		1.449	1.681	1.716	1.664	1.175	•
	¥	Š	¥	¥	¥	¥	¥	Š		0.417	0.371	0.401	0.343	0.392	0.446	0.373	0.405		0.388	0.383	0.352	0.350	0.356	0.415	0.383	0.350	0.341	0.358	0.361	0.306	0.402	0.397	0.378	0.389		0.932	0.890	0.921	1.037	1.185	
•	0.977	0.981	0.978	0.970	0.917	0.981	0.978	0.977		0.978	0.978	1.027	0.980	0.978	0.996	0.897	0.999		1.341	1.346	1.324	1.279	1.345	1.282	1.283	1.323	1.348	1.334	1.347	1.364	1.286	1.403	1.326	1.335		1.351	1.365	1.330	1.361	1.341	
	-	7	က	4	-	7	က	4		-	7	က	4	•	7	က	4		-	7	က	4	-	7	က	4	-	7	က	4	-	7	က	4		-	7	က	4	-	
!	DIS				DIS-Lite					DIS				DIS-Lite					DIS				DIS-Lite				DIS				DIS-Lite					DIS				DIS-Lite	
;	¥ X				ΑX					3,1,5				3,1,5					3,1,5				3,1,5				3,1,5				3,1,5					0,0,0				0'0'0	
:	z				z					z				z					z				Z				>				>					z				z	
:	Š				Non					NoN				No No					E2E				E2E				E2E				E2E					E2E				E2E	
;	DIS	vs.	DIS-Lite		DIS	vs.	DIS-Lite			絽	Thresh			R	Thresh				DIS	vs.	DIS-Lite		SIO	vs.	DIS-Lite		Delay	Comp	(<u>0</u> 0		Delay	Comp	(DC)			DIS	vs.	DIS-Lite		DIS	
	SCRAMNet				SCRAMNet					SCRAMNet				SCRAMNet					15-May Simple	Ethernet			Simple	Ethernet			Simple	Ethernet			Simple	Ethernet				Ethernet	with	Gateways		Ethernet	

4.704	0.457	1.638	2.827	4.001	1.518	2.625	4.355	4.674	of 0-1	7.453	8.709	9.368	9.844	7.761	0.744	9.404	9.720	of 0-1	9.968	0.027	61.084	1.085
80	∞	∞	∞	∞	æ	∞	∞	æ	Ŭ	2	ιΩ	ιΩ	ιΩ	Ω	9	ທ	ιΩ		2	9	9	9
54.704	50.457	51.638	52.827	54.001	51.518	52.625	54.355	54.674		47.453	48.709	49.368	49.844	47.761	50.744	49.404	49.720		49.968	50.027	51.084	51.085
1.800	0.418	1.038	1.488	1.956	0.677	1.272	-0.139	1.863		0.456	1.049	1.400	1.394	0.528	0.924	1.070	1.068		¥	¥	1.957	1.957
3.254	0.715	1.312	1.980	2.435	1.262	1.873	4.880	3.129		0.268	0.716	1.123	1.715	0.460	2.954	1.472	1.863		¥	¥	2.190	2.190
2.903	2.513	2.437	2.570	2.938	2.612	2.731	2.699	2.758		¥	¥	¥	¥	¥	¥	¥	¥		3.319	3.259	¥	¥
0.403	0.500	0.625	0.480	0.405	0.624	0.402	0.624	0.620		0.429	0.610	0.544	0.405	0.400	0.554	0.539	0.468		0.404	0.480	0.625	0.551
1.499	1.510	1.534	1.635	1.863	1,209	1.336	1.397	1.501		Š	Š	¥	Š	¥	¥	¥	¥		2.391	1.831	¥	¥
1.348	0.971	0.851	0.899	1.017	1.325	1.356	1.263	1.241		Ϋ́	Ϋ́	Š	¥	¥	¥	¥	Ϋ́		0.892	1.381	Ϋ́	¥
1.400	1.343	1.278	1.345	1.325	1.421	1.386	1.330	1.320		1.300	1.334	1.301	1.330	1.373	1.312	1.323	1.321		1.281	1.335	1.312	1.387
4	-	7	က	4	-	7	က	4		-	2	ဗ	4	-	7	က	4		-	7	က	4
	DIS				DIS-Lite					DIS				DIS-Lite					DIS	DIS-Lite	DIS	DIS-Lite
	0'0'0				0,0,0					A/N				ΚX					0,0,0	0'0'0	0'0'0	0'0'0
	>				>					z				z					>	>	z	z
	E2E				E2E					E2E				E2E					E2E	E2E	E2E	E2E
	Delay	Comp	(DQ)		Delay	Comp	(DC)			SIC	vs.	DIS-Lite		DIS	vs.	DIS-Lite			2	ည	2	DC
	Ethernet	with	Gateways		Ethernet	with	Gateways			SCRAMNet				SCRAMNet					16-May Ethernet	Ethernet	SCRAMNet	SCRAMNet

Table 20 - Code Timings

3.11 Summary

To review, there were four objectives for NETS:

- Develop Optimized Network Architectures for UTD Applications
- Compare the Improved Network Protocol Designed for Highly Dynamic Air Vehicles (DIS-Lite) with Standard Protocol (DIS)
- Understand Performance Issues of Networks Using Simulator Network Analysis Project Tools
- Recommend an Architecture with the Best Bandwidth Utilization/Truth Data Performance

The first objective was met during some of the earlier steps in the NETS program. Architectures were developed specifically for UTD applications. These architectures were specifically optimized for small numbers of entities on local LANs with a single connection point between the two LANs (the WAN).

The second objective was met by thoroughly testing the DIS and DIS-Lite protocols under all the same conditions. The results were shown and discussed in the previous section (Step 7 - Reduce Data and Analyze). Based on those tables, DIS-Lite does reduce the number of packets on the network, reduces the bandwidth consumed, and maintains simulation data nearly as accurate (differences typically averaged less than one foot) as the DIS protocol in all three architectures (Table 14, Table 15, and Table 16).

The third objective, while not quantifiable in and of itself, was accomplished through the copious amounts of data collected on the network architectures, packet counts, bandwidth utilization, protocol comparisons, delay compensation effects, simulation accuracy (truth data comparisons), threshold comparisons (Table 14, Table 15, and Table 16), end-to-end data values (Table 17, Table 18, Table 19) and code timings (Table 20). Two important conclusions from the data in the tables are that DIS-Lite is a significant improvement to DIS, and that delay compensation is a good thing to do. The delay compensation tended to reduce errors down to around one foot - a vast improvement over the typical 12 foot time frame error. Note that the delay compensation implementation in this study was the standard DIS dead reckoning calculation. The important part of this method is to dead reckon the simulation data just before using it, instead of calculating the data and not using it until later in the simulation time frame.

The fourth objective was to recommend an architecture that had the best bandwidth/truth data performance (and best suited for the UTD applications discussed in the opening sections of this report). Based on all available data, the third architecture - SCRAMNet Architecture - is the best architecture for performance purposes. The SCRAMNet Architecture offers:

- A faster LAN for UTD to UTD communications (since the LAN is being implemented as a shared memory - UTDs need merely access memory instead of utilizing latency causing communication protocols). Table 20 (Code Timings) shows this numerically by lower gateway timings.
- Faster code in the NIU (see Table 20 Code Timings).
- One Ethernet receive interface (off the WAN) which decreases the opportunities of sampling errors (there were two interfaces in the second architecture).
- Local accuracies were better for non-maneuvering (99%), and average for maneuvering (+/- 3%).

3.11.1 Best Performance

For the best performance the SCRAMNet Architecture and the DIS-Lite protocol should be used (over a WAN), along with delay compensation. If WAN bandwidth is a concern, WAN thresholds should be set at 3,1,5 or preferably some optimized settings such as 1,.5,1 [SWAINE95]. If WAN bandwidth is not a concern, then thresholds should be set at 0,0,0 (although this is very rarely done due to the large amount of traffic this setting will cause). This type of setting would be appropriate, however, for a networked simulation with very low numbers of entities and PDUs (perhaps a one versus one scenario).

3.11.2 Best Cost

If cost is a primary concern, then the first architecture - Ethernet Architecture - might edge out the other two architectures:

- The first architecture does not require any additional hardware such as gateways from the second architecture, or SCRAMNet cards from the third architecture. The first architecture would, however, require Ethernet cards located at each UTD. Note that to improve performance, a second Ethernet card should be located inside each device attached to the network. This second card would carry all real-time DIS traffic, while the first would handle the high bandwidth mundane tasks (such as FTP, log-in accounts, communications traffic, etc.)
- The first architecture would need to be programmed to send and receive to the Ethernet cards - a capability some UTDs already have, whereas for the third architecture, new programming would be required to interface to the SCRAMNet cards at each UTD. For the second architecture, additional programming is required for the gateways.

3.11.3 Considerations

If the data is examined closely, both the first and third architectures resulted in the similar performance numbers. An important thing to consider is that these tests used low numbers of entities with only Entity State PDUs. A full simulation would most likely contain a few more entities (possibly enemy air defenses), or more likely, would contain additional PDUs (emissions mostly). This has the possibility of bringing down a single UTD interface (according to Table 20 - Code Timings, some NETS tests took 3-4 ms just for Entity State PDU processing). An important consideration would be the UTD frame rate, and if it could tolerate in its real-time schedule a process with a variable time (from less than one millisecond to greater than four).

3.12 Lessons Learned

NETS was a difficult and complicated program, and numerous lessons were learned during planning, development and testing. The following sections discuss some key lessons learned.

3.12.1 DIS-Lite

Since this was the first program to actually test DIS-Lite, several lessons about its operation were learned. One note was that the DIS-Lite accuracy differed (by one foot on average) with standard DIS. This is most likely due to the fact that DIS-Lite was designed for bandwidth optimization. As part of this optimization, dead reckoning is changed during the simulation to provide the least possible network traffic. It is this constant changing of dead reckoning that might be responsible for the differing accuracy numbers. Note that the accuracy was very close to DIS - still typically within a time frame.

A problem discovered during NETS with DIS-Lite implementation occurs after the first Query PDU arrives. The dead reckoning based on that Query PDU gives an accuracy error of up

to 3-5 times as much as normal. When the next Kinematic PDU arrives, the accuracy errors are back to normal. Note that this only occurs with the arrival of a Query PDU. MaK Technologies has fixed this problem in the latest release of DIS-Lite (Lite1-9).

A possible additional problem that might be contributing to some of the accuracy differences with DIS could be due to network delays. If a sending entity dead reckons a path, then alters it's path and changes the DR algorithm accordingly, a receiving entity may be just getting the original PDU information. That information will be dead reckoned with the first algorithm. Once the second PDU and algorithm arrives, the accuracy difference will be greater, since during that transmit time the sending and receiving entities used different DR algorithms.

3.12.2 Ethernet/Network Configurations

To open multiple sockets on the same machine for the same port and network, you must use the reuse port and reuse address options. If you attach two or more Ethernet interfaces from one machine to the same network, each interface will receive the same packet. Each interface will also deliver that packet to any socket that matches the port number, therefore a process will receive multiple copies of the same packet. This happens when using multicast or broadcast. This is how UDP/IP works and the only way to change it is to change the Ethernet device driver, which is a considerable effort beyond the scope of this project. The work around was to put only two interfaces on one network, use multicast to receive on one interface and send on the other. The IP options for multicast allow users to specify what multicast groups an interface is listening to and what interface to send on. Therefore only the receive interface joined the multicast group to listen, the send interface only sent multicast packets.

3.12.3 Blitzing the Network

The limits of SNAP were definitely tested during the course of the NETS testing. Due to the software design of the network delay function used to simulate long-haul network delay, network packets that were fed in on one side were not always spaced the same way on the other side. Sometimes, the packets were transmitted in groups, one right after the other, with no gap in between. While this is an acceptable networking communication technique, SNAP's network interface would hang and crash with these repeated bursts of grouped packets under heavy network loading. SNAP, by design, can handle 2000 Entity State PDUs per second, sometimes when the packets were grouped by the delay function, instantaneous packet rates exceeded 3000 Entity State PDUs per second. This phenomenon would rarely be seen outside of a testing environment. To overcome the problem of bogging down SNAP in the heavy load cases, the delay function was modified to insert a brief space between packets when sent out as in groups. This brought the instantaneous packet rate down to a level that SNAP could handle, but still accurately simulating a real long-haul network environment.

3.12.4 SCRAMNet

SCRAMNet proved to be a very capable communication medium during NETS testing. SCRAMNet's high bandwidth allowed large amounts of data to be transferred - effectively acting as a continuous memory region at each computer. This high bandwidth would be very useful with simulations using Hardware in the Loop. SCRAMNet's speed also enabled the NETS simulation to perform operations within the same time frame - a necessity for high-accuracy simulations. SCRAMNet also proved easy to synchronize to the rest of the simulation architecture.

3.12.5 Dead Reckoning effects on Latency

One important lesson that was learned after data analysis was the effects of dead reckoning on overall end-to-end latency. Dead reckoning in the DIS protocol consists of two parts - one part at the sending simulation, and one at the receiving simulation. The sending application will only send out PDUs after a specific pre-defined time, rotational or positional threshold is reached. Once a PDU is received, that information is extrapolated by using that PDU's time-stamp to determine where that aircraft would be located at the current simulation time. The latency problem occurs at the sending simulation, and is basically derived from buffering. A simulation could conduct slight movements that are within the threshold range - in this case, no PDU is sent until the time threshold has been reached. When a simulation is performing a movement that exceeds the threshold, there is a gradual increase before the threshold is crossed that is the source of the delay. Worse, this delay is not predictable due to the timing thresholds. The positional thresholds could be exceeded just before or after a timing threshold, resulting in a longer or shorter time period between PDUs respectively. Example delays due to DR thresholds in the NETS study include: 316, 274, 236, 201, and 107 ms (Table 17, Table 18, and Table 19).

While it might be desirable to attempt to eliminate this source of latency within the end-to-end framework to obtain pure network delay values, it was deemed acceptable under NETS - and this is the key lesson that was learned. NETS conducted networking studies under realistic conditions, and these realistic conditions included operation of Dead Reckoning. Since Dead Reckoning would be used normally, it was deemed necessary to leave the latency resulting from Dead Reckoning in the overall calculations.

3.13 Future Work

A natural idea for follow-on work would be to take the architecture and network configurations recommended in this NETS report, and implement them in an operational capacity to include obtaining a long-haul connection between two sites and conducting training tests.

HLA would be another area for follow-on work. Since HLA is a newer networking simulation method, studies comparing the performance of DIS and HLA in terms of latency, bandwidth and accuracies would be important.

Since the network architectures have now been investigated, a good follow-on project would be to conduct studies into network effects on various aspects of simulation using the best architecture and configuration determined from NETS. Weapons flyout options (discussed in Section 2.3.2) would be an excellent candidate. Issues such as operating a weapon's end-game at the target's simulation computers (synchronous), using a weapons server for all weapons, or other advanced weapon flyout notions are key future research areas.

4. Abbreviations

AFRL - Air Force Research Laboratory
AFRL/VACS - Air Vehicle Simulation Branch
ADS - Advanced Distributed Simulation
ASC - Aeronautical Systems Center
AMG - Architecture Management Group
API - Application Programming Interface

C4I - Command, Control, Communications, Computers and Intelligence

CSMA/CD - Carrier Sense Multiple Access/Collision Detection
DARPA - Defense Advanced Research Projects Agency

DD/PC - Data Dictionary/Protocol Catalog

DDR&E - Director, Defense Research & Engineering

DIS - Distributed Interactive Simulation

DMSO - Defense Modeling and Simulation Office

DoD - Department of Defense
ECM - Electronic Counter Measures
FOM - Federation Object Model

EVDAS - Electronic Visual Display Attitude Sensor

GPS - Global Positioning System
GUI - Graphical User Interface
HDD - Heads Down Display
HLA - High Level Architecture
HOTAS - Hands On Throttle and Stick

IEEE - Institute of Electrical and Electronics Engineers

I/O - Input/Output
IP - Internet Protocol
iRMX - Intel RMX

I/ITSEC - Interservice/Industry Training Systems and Education Conference

LAN - Local Area Network
LCD - Liquid Crystal Display
M&S - Modeling & Simulation

NETS - Network Evaluation for Training and Simulation

NIU - Network Interface Unit
OMT - Object Model Template
OTW - Out The Window
PCS - Piloted Combat Station
PDU - Protocol Data Unit

RMS - Reflective Memory System

RTI - Run Time Interface SAM - Surface-to-air-Missile

SBIR - Small Business Innovative Research

SG - Silicon Graphics

SNAP - Simulation Network Analysis Project

SOM - Simulation Object Model SPO - Systems Program Office

STGVIP - Special Task Group for Vision Implementation Plan

STOW - Synthetic Theater of War

STOW-E - Synthetic Theater of War in Europe

TBD - To Be Determined

TSPG - Training Systems Product Group

UDP/IP - User Datagram Protocol/Internet Protocol

USD(A&T) - Under Secretary of Defense for Acquisition and Technology

UTD - Unit Training Device WAN - Wide Area Network

WPAFB - Wright Patterson Air Force Base

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6. APPENDIX A - HLA and DIS++

6.1 High Level Architecture (HLA)

In accordance with the Department of Defense (DoD) Modeling and Simulation (M&S) Master Plan (DoD 5000.59-P, dated October 1995), the Defense Modeling and Simulation Office (DMSO) is leading a DoD-wide effort to establish a common technical framework to facilitate the interoperability of all types of models and simulations among themselves and with Command, Control, Communications, Computers and Intelligence (C4I) systems, as well as to facilitate the reuse of M&S components. This Common Technical Framework includes the HLA, which represents the highest priority effort within the DoD modeling and simulation community. Initial definition of the M&S HLA was accomplished under the sponsorship of the Defense Advanced Research Projects Agency (DARPA) Advanced Distributed Simulation (ADS) program. It was transitioned to DMSO in March 1995 for further development by the DoD-wide Architecture Management Group (AMG). Central to this task was the development of a set of prototypes which addressed critical issues in the HLA. The HLA Baseline Definition was completed 21 August 1996. It was approved by the Under Secretary of Defense for Acquisition and Technology [USD(A&T)] as the standard technical architecture for all DoD simulations on 10 September 1996.

The DoD Modeling and Simulation Master Plan calls for a "review [of] all ongoing DoD M&S projects and/or programs by second quarter FY 1997 for feasibility of immediately adopting the HLA. If not immediately feasible, these reviews shall establish the date by which each program shall comply. If a specific M&S project and/or program is unable to comply with the HLA, the developing Component must report the reason(s) for non-compliance to DDR&E" (Director, Defense Research & Engineering).

HLA is defined in three parts by an interface specification: an Application Programming Interface (API) called a Run Time Infrastructure (RTI), an Object Model Template (OMT), and a set of underlying technical principles (rules).

HLA changes some existing terminology as well. A single simulation is considered a 'federate', and a collection of federates participating together in a joint simulation exercise or test is considered a 'federation'.

The following sections discuss the Run Time Infrastructure (information from Interface Specification Version 1.1 Final Draft dated 4 February 1997), Object Model Template (information from Object Model Template Version 1.1 dated 12 February 1997), and HLA Rules (information from HLA Rules Version 1.0 dated 15 August 1996). All these documents are available on the DMSO WWW site (http://www.dmso.mil).

6.1.1 Run Time Infrastructure

The RTI provides services to federates in a way that is analogous to how a distributed operating system provides services to applications. These interfaces are arranged into the six basic RTI service groups given below:

- Federation Management
- Declaration Management
- Object Management
- Ownership Management

- Time Management
- Data Distribution Management

The six service groups describe the interface between the federates and the RTI, and the software services provided by the RTI for use by HLA federates. The initial set of these services was chosen to be those functions most likely to be required across multiple federations. As a result, federate applications will require most of the services described.

A concise and rigorous description of the object model framework is essential to the specification of the interface between federates and the RTI and of the RTI services. The rules and terminology used to describe a Federation Object Model (FOM) are described in the "High Level Architecture Object Model Template". A Simulation Object Model (SOM) describes salient characteristics of a federate to aid in its reuse and other activities focused on the details of its internal operation and as such is not the concern of the RTI and its services. A FOM, on the other hand, deals with inter-federate issues and is relevant to the use of the RTI. The DoD HLA definition states that federation object models describe:

- The set of object classes chosen to represent the real world for a planned federation,
- The set of interaction classes chosen to represent the interplay among real world objects,
- · The attribute and parameters of these classes,
- The level of detail at which these classes represent the real world, including all characteristics.

Every object is an instance of an object class found in the FOM. Object class names are chosen by the object model designer to facilitate a desired organizational scheme. Each object class has a set of attribute names associated with it. An attribute is a named portion of the object state. In this discussion, "attribute name" refers to the name of the attribute and "attribute value" refers to its contents. From the federation perspective, the set of all attribute values for a particular object completely defines the state of the object. Federates are free to associate additional state information with an object that is not communicated between federates, but this is outside the HLA federation object model purview.

Federates use the state of the objects as one of the primary means of communication. At any given time only one federate is responsible for simulating a given object attribute. That federate provides new values for that attribute to the other federates in the federation execution through the RTI services. The federate providing the new attribute values is said to be *updating* that attribute value. Federates receiving those values are said to be *reflecting* that attribute.

The privilege to update a value for an attribute is uniquely held by a single federate at any given time during a federation execution. A federate that has the privilege to update values for an attribute is said to *own* that attribute. The RTI provides services that allow federates to exchange ownership of object attributes. The federate that registers an object implicitly has the privilege to delete that object. The RTI provides services that allow federates to transfer the "privilegeToDeleteObject" attribute in the same way as other attributes.

All objects have an ID. The value of the ID is unique for each federation execution. Object IDs are dynamically generated by an RTI service or can be drawn from a pool of reserved values. These reserved values are set aside for special situations where federates must have knowledge of object IDs before a federation execution begins.

The FOM framework also allows for interaction classes for each object model. The types of interactions possible between different classes of objects, their affected attributes and the interaction parameters are specified. An interaction is an explicit action taken by an object, that can optionally be directed toward another object.

A federation is the combination of a particular FOM, a particular set of federates, and the RTI services. A federation is designed for a specific purpose using a commonly understood federation object model and a set of federates that can associate their individual semantics with that object model. A federation execution is an instance of executing the federation with a specific FOM, an RTI and using various execution details.

6.1.2 Object Model Template

HLA object models are composed of a group of interrelated components specifying information about classes of objects, their attributes, and their interactions. While it is possible to represent the information content of these components in many different ways, the HLA requires documentation of these components in the form of tables. The template for the core of an HLA object model uses a tabular format and consists of the following components:

- **Object Class Structure Table:** To record the subclass-superclass relations between different types of simulation/federation objects.
- **Object Interaction Table:** To record the types of interactions possible between different classes of objects, their affected attributes, and the interaction parameters.
- Attribute/Parameter Table: To specify features of the public attributes of objects and the parameters of interactions in a simulation/federation.
- FOM/SOM Lexicon: To define all of the terms used in the tables.

Both federations and individual simulations (federates) are required to use all four of the core OMT components when providing an HLA object model, although, in some cases, certain tables may be empty. Since all object information is classified by object classes, there must be at least one object class for any meaningful HLA object model. Thus, every HLA object model must have an Object Class Structure Table containing at least one object class.

While federations typically will support interactions among some of the objects of its federates, some federates (such as a stealth viewer) might not be involved in interactions, so the Object Interaction Table may be empty for some HLA object models. It is expected that federates will commonly have objects with attributes of interest across the federation, in which cases, their documentation in the Attribute/Parameter Table is required. However, a federate or an entire federation may exchange information solely via interactions, in which case its Attribute/Parameter Table may be empty. While either the Object Interaction Table or the Attribute/Parameter Table may, thus, be empty, an HLA object model would not be of much use if both of these tables were empty since such a model would not support any exchange of information between federates except for notifications of the existence of objects.

The final HLA OMT component, the FOM/SOM Lexicon, is essential to ensure that the semantics of the terms used in an HLA object model are understood and documented. Since there will always be at least one term in an HLA object model, there will always be at least one term defined in the Lexicon, and ordinarily many more.

In addition to the OMT components shown above, federates and federations may also include supplemental categories of descriptive information in order to facilitate a more complete understanding of the object model. The format and content of this optional information is provided in the OMT Extensions Document.

6.1.3 Rules

General principles defining the HLA are described and the set of rules which apply to HLA federations and federates are delineated. Each rule is then described. Further information on these rules can be found at DMSO.

Rules for federations are:

- 1 Federations shall have an HLA Federation Object Model, documented in accordance with the HLA Object Model Template.
- 2 In a federation, all representation of objects in the FOM shall be in the federates, not in the runtime infrastructure.
- 3 During a federation execution, all exchange of FOM data among federates shall occur via the RTI.
- 4 During a federation execution, federates shall interact with the Runtime Infrastructure in accordance with the HLA interface specification.
- During a federation execution, an attribute of an instance of an object shall be owned by only one federate at any given time.

Rules for federates are:

- Federates shall have an HLA Simulation Object Model, documented in accordance with the HLA Object Model Template.
- 2 Federates shall be able to update and/or reflect any attributes of objects in their SOM and send and/or receive SOM object interactions externally, as specified in their SOM
- Federates shall be able to transfer and/or accept ownership of attributes dynamically during a federation execution, as specified in their SOM.
- Federates shall be able to vary the conditions (e.g., thresholds) under which they provide updates of attributes of objects, as specified in their SOM.
- Federates shall be able to manage local time in a way which will allow them to coordinate data exchange with other members of a federation.

6.2 DIS++

The name DIS++ has been chosen to communicate the essential objective of expanding the standards development activities to include both the High Level Architecture and other members of the modeling and simulation community. DIS++ refers to the evolution of the DIS standards to cover areas of modeling and simulation identified in the DIS Vision document but not addressed in the current standards (e.g. event driven simulations, analytic models, interfaces to operational systems).

DIS++ standards development will be conducted by the standards development organization and processes resulting from implementing the plan prepared by the current Special Task Group for Vision Implementation Plan (STGVIP) . The DIS++ standards workshop will

assume responsibility for standardization of the main components of the baseline HLA and other standards important to the M&S community as part of the normal standards development process. The DIS++ standards body will also expand the DIS DD/PC (Data Dictionary/Protocol Catalog) to include common data structures needed by DIS++ applications. This expanded product will called simply the DIS++ Protocol Catalog.

The difference between DIS++ and HLA is that HLA is an architecture, defined by an interface specification (with corresponding API), an Object Model Template, and a set of underlying technical principles (rules). DIS++ is a set of standards supporting this architecture. It is envisioned that, during the design and implementation of an HLA federation, certain resources, such as a Protocol Catalog (an extension of the DIS Data Dictionary/Protocol Catalog) will be available through on-line repositories. Note that there is still considerable confusion between the terms DIS++ and HLA and what each notion entails and represents. The next few years will determine the true status of these architectures and implementation standards.

There will not be a DIS 3.0, in the sense of another DIS generation between the current 2.x standard and the HLA compliant version. Future evolution of DIS is denoted DIS++. The architecture adopted for DIS++ is HLA

7. APPENDIX B - Simulation Recorded Data

This appendix contains the reduced version of the data recorded by the simulations. The raw data files were enormous, and were therefore reduced to be presented in this report. These data files contain:

- DIS Interface #1 Timing Information
- DIS Interface #2 Timing Information
- Delay Function PDU Information (one side of the delay function only)
- Delay Function Frame Timing Information (one side of the delay function only)
- Delay Function Total PDU count
- Delay Function PDU Delays (Side One)
- Delay Function PDU Delays (Side Two)
- Code Timings (see Section 3)
- SNAP Timing Data for the WAN
- Piloted Simulator's ('SEL-J') Information about Piloted Simulator ('SEL-G')
- Piloted Simulator's ('SEL-G') Information about Piloted Simulator ('SEL-J')
- SNAP's Recordings on Sel-J's Information about Digital #1 (1J) on Sel-J's LAN
- SNAP's Recordings on Sel-J's Information about Digital #2 (2J) on Sel-J's LAN
- SNAP's Recordings on Sel-J's Information about Digital #3 (3J) on Sel-J's LAN
- SNAP's Recordings on Sel-J's Information about Digital #1 (1G) on Sel-G's LAN (across WAN)
- SNAP's Recordings on Sel-J's Information about Digital #2 (2G) on Sel-G's LAN (across WAN)
- SNAP's Recordings on Sel-J's Information about Digital #3 (3G) on Sel-G's LAN (across WAN)
- SNAP's Recordings on Sel-G's Information about Digital #1 (1G) on Sel-G's LAN
- SNAP's Recordings on Sel-G's Information about Digital #2 (2G) on Sel-G's LAN
- SNAP's Recordings on Sel-G's Information about Digital #3 (3G) on Sel-G's LAN
- SNAP's Recordings on Sel-G's Information about Digital #1 (1J) on Sel-J's LAN (across WAN)
- SNAP's Recordings on Sel-G's Information about Digital #2 (2J) on Sel-J's LAN (across WAN)
- SNAP's Recordings on Sel-G's Information about Digital #3 (3J) on Sel-J's LAN (across WAN)

DIS Interface #1 & #2 Timing Information

This data, spread out over two groupings is information about the DIS Interface. There were two DIS Interfaces, resulting in two sets of identical information. This timing data is very similar to the NIU code timings mentioned previously in the report. Each set contains identical information:

- 1. Filename for DIS Interface #1 or #2 data.
- 2. The number of frames used during the test run.
- 3. The average time of execution (in seconds) of the DIS Interface.
- 4. The maximum time of execution (in seconds) of the DIS Interface.
- 5. The 2nd maximum time of execution (in seconds) of the DIS Interface. This datapoint is taken since initialization is done during the first frame of execution typically resulting in the maximum execution time always being during the first frame. The 2nd maximum time will usually be the main datapoint during a run that isn't influenced by initialization overhead.
- 6. The minimum time of execution (in seconds) of the DIS Interface.
- 7. The number of errors (a debug feature). This indicates how many frame times executed in over 20ms.

Delay Function PDU Information

This data set contains the following information about the Delay Function's PDU count (one side only):

- 1. The filename holding this and the rest of the information in Appendix B.
- 2. The total number of PDUs sent to the delay function from this one side.
- 3. The total number of PDUs sent to the delay function from this one side according the 'count' variable (used for debugging).
- 4. The average number of PDU's per second transmitted. This number is not really the number of PDU's sent rather it's an indication of the 'bursting' or 'blitzing' of the network. The number of PDU's that were sent is listed as item number 2 above but these were sent out so quickly that it resulted in the average PDU's per second rating listed here.
- 5. The maximum number of PDU's per second transmitted ('bursting' as described above).
- 6. The 2nd maximum number of PDU's per second transmitted ('bursting' as described above). This datapoint is taken since initialization is done during the first frame of execution typically resulting in the maximum execution time always being during the first frame. The 2nd maximum time will usually be the main datapoint during a run that isn't influenced by initialization overhead.
- 7. The minimum number of PDU's per second transmitted ('bursting' as described above).

Delay Function Frame Timing Information

This data set contains the following timing information about the Delay Function (one side only):

- 1. The number of frames used during the test run.
- 2. The average time of execution (in seconds) of the Delay Function.
- 3. The maximum time of execution (in seconds) of the Delay Function.
- 4. The 2nd maximum time of execution (in seconds) of the Delay Function. This datapoint is taken since initialization is done during the first frame of execution typically resulting in the maximum execution time always being during the first frame. The 2nd maximum time will usually be the main datapoint during a run that isn't influenced by initialization overhead.
- 5. The minimum time of execution (in seconds) of the Delay Function.

Delay Function Total PDU Count

This data point displays the number of PDUs that were received by the Delay Function from each side.

Delay Function PDU Delays (Side One [Buffer 1] & Side Two [Buffer 2])

This data displays the WAN Delay Function's PDU delays (as recorded by the simulation) for this particular side of the Delay Function. SNAP recorded this information also (listed below). The data includes:

- 1. Number of PDUs handled by this side of the delay function.
- 2. Average Delay Function latency in seconds.
- 3. Variance of the Delay Function latency in seconds.
- 4. Maximum Delay Function latency in seconds.
- 5. 2nd Maximum PDU latency in seconds. This datapoint is taken since initialization is done during the first frame of execution typically resulting in the maximum execution time always being during the first frame. The 2nd maximum time will usually be the main datapoint during a run that isn't influenced by initialization overhead.
- 6. Minimum Delay Function latency in seconds.

Code Timings

This data displays the timing data (in seconds) for each delay variable in the architecture (T_{ss} , T_{ns} , T_{rr} , T_{rs} , NIU, T_{gs} , T_{gr}).

SNAP Timing Data for the WAN

This data displays the SNAP-recorded information about the WAN network latency for the PDUs for this particular test run. The data includes:

- 1. Average PDU WAN latency in seconds.
- 2. Maximum PDU WAN latency in seconds.
- 3. Minimum PDU WAN latency in seconds.
- 4. PDU WAN latency Variance in seconds.
- 5. PDU WAN latency Standard Deviation in seconds.

Piloted Simulator's ('SEL-J') Information about Piloted Simulator ('SEL-G')

This data is the accuracy data recorded by the simulation computers. This data includes accuracy information relating to where SEL-J thinks SEL-G is located. The data includes:

- 1. Data file name when j is first, the data is for where j 'thinks it knows' g is located. When g is first, the data is for where g 'thinks it knows' j is located.
- 2. Data file name the truth data of SEL-G is located here.
- 3. Average positional error (in feet).
- 4. Standard deviation of state variable truth data (in feet).
- 5. Maximum positional error (in feet).
- 6. Minimum positional error (in feet).

Piloted Simulator's ('SEL-G') Information about Piloted Simulator ('SEL-J')

This data is the accuracy data recorded by the simulation computers. This data includes accuracy information relating to where SEL-G thinks SEL-J is located. The data includes:

- 1. Data file name when j is first, the data is for where j 'thinks it knows' g is located. When g is first, the data is for where g 'thinks it knows' j is located.
- 2. Data file name the truth data of SEL-J is located here.
- 3. Average positional error (in feet).
- 4. Standard deviation of state variable truth data (in feet).
- 5. Maximum positional error (in feet).
- 6. Minimum positional error (in feet).

Piloted Simulator Information About Digital Players

These data sets, contained over twelve different groupings contains the truth data comparisons for where each piloted player 'thinks it knows' where each individual digital player is (both on the local LAN, and across the WAN on the other LAN). The data sets were developed by combining information from the simulator data files (DCU data) and the SNAP data files. The data includes:

- 1. Data file names when j is first (the first letter after "../DCU/"), the data is for where j 'thinks it knows' the digital player is located. The digital player is marked by digi1j, digi2j, digi3j, digi1g, digi2g, digi3g (last letters in the filename) which represents which digital player is being compared and whether it is on J or G's LAN. For example, digi1j would be digital player number one on J's LAN, and digi3g would be digital player number three on G's LAN.
- 2. Average positional error (in feet).
- 3. Standard deviation of state variable truth data (in feet).
- 4. Maximum positional error (in feet).
- 5. Minimum positional error (in feet).

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7.1.1 Stats.001

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.000938559 Maximum: 0.006525 2nd Max: 0.003263 Minimum: 0.000396

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00104605 Maximum: 0.00603 2nd Max: 0.002867 Minimum: 0.000494

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 23 Count: 23 Average: 1822.88 Maximum: 2525.25 2nd Max: 2020.2 Minimum: 1445.09

Frames: 448195 Average: 0.000218047 Maximum: 0.010692 2nd Max: 0.010198 Minimum: 1.8e-05

PDUs from Net1: 20 PDUs from Net2: 23

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 20 Average: 0.0466552 Variance: 6.66863e-05 Maximum: 0.069009 2nd Max: 0.062583 Minimum: 0.03401

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 23 Average: 0.0461147 Variance: 0.000157366 Maximum: 0.067032 2nd Max: 0.063373 Minimum: 0.022542

-- End Stats from CircularBuffer --

Code Times Tss avg.:

0.00070326441356094807

Tns avg.:

0.00040360834975423714

0.00054854274350790136

Trs avg.:

0.0002026898609025304

NIU avg.:

0.0010018330017925439

Tgs avg.: 0 Tgr avg.:

0.00029541152916158037

SNAPPdus.pl

Average: 0.049454 Maximum: 0.076808 Minimum: 0.023941 Variance: 0.000124 Std Dev: 0.011155

DCUAccuracy

j12may.001.dat.g q12may.001.dat.ownship

Average:

12.487167507229

Stdev: 0.893705904484 Max : 13.369897842407 Min: 1.230449080467

DCUAccuracy

g12may.001.dat.i

j12may.001.dat.ownship

Average:

12.891733541091

Stdev: 1.081881761551 Max : 19.601392745972 Min : 0.323610872030

SNAPAccuracy

../DCU/i12mav.001.dat.1i s211t3.dat.digi1J

Average: 5.755068150478 Stdev: 0.174107715487 Max : 5.958129882812 Min : 2.680000066757

SNAPAccuracy

../DCU/j12may.001.dat.2j

s211t3.dat.digi2J

Average: 6.066122418012 Stdev: 0.175081104040 Max : 6.268000125885 Min : 2.976000070572

SNAPAccuracy

../DCU/j12may.001.dat.3j

s211t3.dat.digi3J

Average: 6.346697659027 Stdev: 0.177354797721 Max : 6.565000057220 Min : 3.243000030518

SNAPAccuracy

../DCU/j12may.001.dat.1g

s211t3.dat.digi1G

Average: 5.716191287497 Stdev: 0.473296046257 Max : 5.950930118561 Min : 0.101999998093

SNAPAccuracy

../DCU/j12may.001.dat.2g

s211t3.dat.digi2G

Average: 6.008712511758 Stdev: 0.659712910652 Max : 6.268000125885 Min : 0.203000009060

SNAPAccuracy

../DCU/i12may.001.dat.3g

s211t3.dat.digi3G

Average: 6.307518624014 Stdev: 0.488996177912 Max : 6.565000057220 Min : 0.500000000000

SNAPAccuracy

../DCU/q12may.001.dat.1i

s211t3.dat.digi1J

Average: 5.753017559060 Stdev: 0.676035702229 Max : 6.017230033875 Min : 0.013000000268

SNAPAccuracy

../DCU/g12may.001.dat.2j

s211t3.dat.digi2J

Average: 6.107633084485 Stdev: 0.484505623579 Max : 6.341000080109 Min : 0.291999995708

SNAPAccuracy

../DCU/g12may.001.dat.3j

s211t3.dat.digi3J

Average: 6.373979160438 Stdev: 0.682054340839 Max : 6.638000011444 Min : 0.588999986649

SNAPAccuracy

../DCU/q12may.001.dat.1q

s211t3.dat.digi1G

Average: 5.836782259100 Stdev: 0.165568843484 Max: 6.043330192566 Min: 3.019999980927

SNAPAccuracy

../DCU/g12may.001.dat.2g

s211t3.dat.digi2G

Average: 6.147884040527 Stdev: 0.165518030524 Max: 6.341000080109 Min: 3.346999883652

SNAPAccuracy

../DCU/g12may.001.dat.3g

s211t3.dat.digi3G

Average: 6.428497863831 Stdev: 0.166849672794 Max: 6.638000011444 Min: 3.643000125885

7.1.2 Stats.002

/usr1/figd/DIS2.2/dis4.stats

Frames: 503 Average: 0.00203726 Maximum: 0.012372 2nd Max: 0.007414 Minimum: 0.000495

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 501

Average: 0.00189054 Maximum: 0.00613 2nd Max: 0.002076 Minimum: 0.000396

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 1001 Count: 951 Average: 2034.78 Maximum: 10638.3 2nd Max: 3367 Minimum: -2457

Frames: 373621 Average: 0.000220687 Maximum: 0.011088 2nd Max: 0.010396 Minimum: 1.9e-05

PDUs from Net1: 1000

PDUs from Net2: 1001

PDU Buffer 1
-- Stats from
CircularBuffer -NumPass: 1000
Average: 0.045995
Variance: 9.96692e-05
Maximum: 0.073656
2nd Max: 0.070393
Minimum: 0.015719
-- End Stats from

CircularBuffer ---

PDU Buffer 2
-- Stats from
CircularBuffer -NumPass: 1001
Average: 0.0453203
Variance: 0.000103803
Maximum: 0.079998
2nd Max: 0.070887
Minimum: 0.010183
-- End Stats from

SNAPPdus.pl Average: 0.051628 Maximum: 0.089469 Minimum: 0.011618 Variance: 0.000114 Std Dev: 0.010654

CircularBuffer --

SNAPTimes.pl s231t3.dat | SNAPCodeTimes.pl Sel-J Tss avg.: 0.00070110159357722132 Sel-J Tns avg.: 0.00031842031884628654 Sel-J Tnr avg.: 0.0014012031873087008 Sel-J Trs avg.: 0.0001892529880679936 Sel-J NIU avg.: 0.0017702749005203001

Sel-J Tgs avg.: 0 Sel-J Tgr avg.:

0.00029541035691221465

DCUAccuracy j12may.002.dat.g g12may.002.dat.ownship Average: 12.552493351121

Stdev: 0.239804223180 Max: 13.377373695374 Min: 12.115049362183 DCUAccuracy g12may.002.dat.j

j12may.002.dat.ownship Average: 12.863048983102 Stdev: 0.246836408973 Max: 13.675812721252 Min: 12.393345832825

SNAPAccuracy

../DCU/j12may.002.dat.1j

s231t3.dat.digi1J

Average: 5.751956964743 Stdev: 0.108648218215 Max: 5.957880020142 Min: 5.541999816895

SNAPAccuracy

../DCU/j12may.002.dat.2j

s231t3.dat.digi2J

Average: 13.625763442300 Stdev : 2.660414934158 Max : 17.502138137817 Min : 9.211404800415

SNAPAccuracy

../DCU/j12may.002.dat.3j

s231t3.dat.digi3J

Average: 15.419030037312 Stdev : 2.584115266800 Max : 19.176839828491 Min : 9.979197502136

SNAPAccuracy

../DCU/j12may.002.dat.1g

s231t3.dat.digi1G

Average: 5.738119830770 Stdev: 0.106105975807 Max: 5.949999809265 Min: 5.541999816895

SNAPAccuracy

../DCU/j12may.002.dat.2g

s231t3.dat.digi2G

Average: 19.746663446349 Stdev : 2.911425590515 Max : 29.613281250000 Min : 13.149539947510

SNAPAccuracy

../DCU/j12may.002.dat.3g

s231t3.dat.digi3G

Average: 21.117265028682 Stdev: 2.891068935394 Max: 29.750019073486 Min: 13.490432739258

SNAPAccuracy

../DCU/g12may.002.dat.1j

s231t3.dat.digi1J

Average: 5.817789268888

Stdev: 0.104382924736 Max: 6.019999980927 Min: 5.631000041962

SNAPAccuracy

../DCU/g12may.002.dat.2j

s231t3.dat.digi2J

Average: 19.804669525861 Stdev : 2.679460763931 Max : 27.555639266968 Min : 11.966495513916

SNAPAccuracy

../DCU/g12may.002.dat.3j

s231t3.dat.digi3J

Average: 21.322613459741 Stdev : 2.747789382935 Max : 29.074880599976 Min : 13.764869689941

SNAPAccuracy

../DCU/g12may.002.dat.1g

s231t3.dat.digi1G

Average: 5.831541607597 Stdev: 0.107604861259 Max: 6.034679889679 Min: 5.631000041962

SNAPAccuracy

../DCU/g12may.002.dat.2g

s231t3.dat.digi2G

Average: 13.785680603259 Stdev : 2.694963693619 Max : 17.727128982544 Min : 9.338016510010

SNAPAccuracy

../DCU/g12may.002.dat.3g

s231t3.dat.digi3G

Average: 15.626391963766 Stdev : 2.595928907394 Max : 19.405294418335 Min : 10.085804939270

7.1.3 Stats.003

/usr1/figd/DIS2.2/dis4.stats

Frames: 500

Average: 0.00139187 Maximum: 0.010594 2nd Max: 0.006327 Minimum: 0.000888

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 501

Average: 0.00161068 Maximum: 0.006921 2nd Max: 0.001384 Minimum: 0.000889

RateErr: 0

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs: 516 Count: 506 Average: 1899.17 Maximum: 10869.6 2nd Max: 3378.38 Minimum: -234.824

Frames: 438440 Average: 0.00022167 Maximum: 0.010989 2nd Max: 0.010198 Minimum: 1.8e-05

PDUs from Net1: 513 PDUs from Net2: 516

PDU Buffer 1

- Stats from
CircularBuffer --

NumPass: 513
Average: 0.0448568
Variance: 8.96979e-05
Maximum: 0.07761
2nd Max: 0.072864
Minimum: 0.012754
-- End Stats from
CircularBuffer --

PDU Buffer 2

-- Stats from --CircularBuffer --

NumPass: 516
Average: 0.0451316
Variance: 9.44353e-05
Maximum: 0.070887
2nd Max: 0.068514
Minimum: 0.007613
-- End Stats from

CircularBuffer --

SNAPPdus.pl Average: 0.049168 Maximum: 0.081722 Minimum: 0.013361 Variance: 0.000094 Std Dev: 0.009717

SNAPTimes.pl Sel-J Tss avg.:

0.00065354980075332076

Sel-J Tns avg.:

0.00042651792823182106

Sel-J Tnr avg.:

0.0010404621516282493

Sel-J Trs avg.:

0.0006272948208296082

Sel-J NIU avg.:

0.0015195796812735628

Sel-J Tgs avg.: 0 Sel-J Tgr avg.:

0.00029541035691221465

DCUAccuracy j12may.003.dat.g

g12may.003.dat.ownship Average: 12.542753096301 Stdev : 0.249669313431 Max : 13.431278228760 Min : 12.019831657410

DCUAccuracy g12may.003.dat.j

j12may.003.dat.ownship Average: 12.897736393322 Stdev: 0.234322860837 Max: 13.736789703369 Min: 12.401119232178

SNAPAccuracy

../DCU/j12may.003.dat.1j

s221t3.dat.digi1J

Average: 5.741522681761 Stdev: 0.108854852617 Max: 5.965000152588 Min: 5.526000022888

SNAPAccuracy

../DCU/j12may.003.dat.2j

s221t3.dat.digi2J

Average: 6.068035454156 Stdev: 0.108165621758 Max: 6.266990184784 Min: 5.864999771118

SNAPAccuracy

../DCU/j12may.003.dat.3j

s221t3.dat.digi3J

Average: 14.545737239730 Stdev: 2.349464178085 Max: 18.161069869995 Min: 9.599011421204

SNAPAccuracy

../DCU/j12may.003.dat.1g

s221t3.dat.digi1G

Average: 5.738428297543 Stdev: 0.108680464327 Max: 5.965000152588 Min: 5.521999835968 **SNAPAccuracy**

../DCU/j12may.003.dat.2g

s221t3.dat.digi2G

Average: 6.065186846641 Stdev: 0.107785135508 Max: 6.261000156403

Min : 5.864999771118

SNAPAccuracy

../DCU/j12may.003.dat.3g

s221t3.dat.digi3G

Average: 20.103879876570 Stdev: 2.707454681396 Max: 29.867988586426 Min: 13.289018630981

SNAPAccuracy

../DCU/g12may.003.dat.1j

s221t3.dat.digi1J

Average: 5.837389351892 Stdev : 0.106058605015 Max : 6.033999919891 Min : 5.638999938965

SNAPAccuracy

../DCU/g12may.003.dat.2j

s221t3.dat.digi2J

Average: 6.145868247446 Stdev: 0.107483670115 Max: 6.345290184021 Min: 5.934999942780

SNAPAccuracy

../DCU/g12may.003.dat.3j

s221t3.dat.digi3J

Average: 20.026624587088 Stdev: 2.535664319992 Max: 29.037858963013 Min: 11.242247581482

SNAPAccuracy

../DCU/g12may.003.dat.1g

s221t3.dat.digi1G

Average: 5.822608978394 Stdev: 0.108845494688 Max: 6.033999919891 Min: 5.610000133514

SNAPAccuracy

../DCU/g12may.003.dat.2g

s221t3.dat.digi2G

Average: 6.149152114209 Stdev: 0.108145900071 Max: 6.356090068817 Min: 5.934999942780

SNAPAccuracy

../DCU/g12may.003.dat.3g

s221t3.dat.digi3G

Average:

14.890643793895

Stdev : 2.481486797333 Max : 18.409097671509 Min : 9.822422981262

7.1.4 Stats.004

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.00225484 Maximum: 0.006031 2nd Max: 0.001384 Minimum: 0.00089

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00235948 Maximum: 0.012472 2nd Max: 0.006624 Minimum: 0.00089

RateErr: 0

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs: 1511 Count: 1337 Average: 2020.17 Maximum: 3378.38 2nd Max: 3378.38 Minimum: -630.994

Frames: 318297 Average: 0.000225836 Maximum: 0.011483 2nd Max: 0.010494 Minimum: 8.8e-05

PDUs from Net1: 1508 PDUs from Net2: 1511

PDU Buffer 1
-- Stats from

CircularBuffer ---

NumPass: 1508
Average: 0.0451403
Variance: 9.96256e-05
Maximum: 0.080972
2nd Max: 0.072271
Minimum: 0.007119

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 1511 Average: 0.0454999 Variance: 9.5514e-05 Maximum: 0.076325 2nd Max: 0.073161 Minimum: 0.015127

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.048624 Maximum: 0.085990 Minimum: 0.009476 Variance: 0.000100 Std Dev: 0.010008

SNAPTimes.pl

Sel-J Tss avg.:

0.00069895219151719118

Sel-J Tns avg.:

0.00034208964153871951

Sel-J Tnr avg.:

0.0019516115536529707

Sel-J Trs avg.:

0.00048310756963372521

Sel-J NIU avg.:

0.002323033864603172

Sel-J Tgs avg.: 0 Sel-J Tgr avg.:

0.00029541035691221465

DCUAccuracy j12may.004.dat.g

g12may.004.dat.ownship Average: 12.547289384950 Stdev: 0.238720118999 Max: 13.370841979980 Min: 12.042332649231

DCUAccuracy g12may.004.dat.i

j12may.004.dat.ownship Average: 12.896915426158 Stdev: 0.225177273154 Max: 13.675244331360 Min: 12.455402374268

SNAPAccuracy

../DCU/j12may.004.dat.1j

s241t3.dat.digi1J

Average: 13.344591117767 Stdev : 2.591045379639 Max : 17.282411575317 Min : 9.048884391785

SNAPAccuracy

../DCU/j12may.004.dat.2j

s241t3.dat.digi2J

Average: 14.277028930235 Stdev: 2.790544748306 Max : 18.270502090454 Min: 9.589523315430

SNAPAccuracy

../DCU/j12may.004.dat.3j

s241t3.dat.digi3J

Average: 15.897639946765 Stdev: 2.731149673462 Max: 19.434999465942 Min : 10.508561134338

SNAPAccuracy

../DCU/i12may.004.dat.1g

s241t3.dat.digi1G

Average: 19.418693565553 Stdev: 2.622908592224 Max : 26.557821273804 Min : 12.749041557312

SNAPAccuracy

../DCU/i12may.004.dat.2g

s241t3.dat.digi2G

Average: 19.945093233739 Stdev: 2.648649215698 Max : 29.990840911865 Min: 13.322060585022

SNAPAccuracy

../DCU/j12may.004.dat.3g

s241t3.dat.digi3G

Average: 20.863587346703 Stdev: 2.763794898987 Max : 30.218219757080 Min: 13.736937522888

SNAPAccuracy

../DCU/q12may.004.dat.1j

s241t3.dat.digi1J

Average: 19.552829761737 Stdev: 2.654239892960 Max : 29.712064743042 Min : 11.074309349060

SNAPAccuracy

../DCU/g12may.004.dat.2j

s241t3.dat.digi2J

Average: 20.010528750958 Stdev: 2.589186191559 Max: 33.949886322021 Min: 13.510099411011

SNAPAccuracy

../DCU/g12may.004.dat.3i

s241t3.dat.digi3J

Average: 20.999985261397 Stdev: 2.793797969818 Max: 30.059724807739 Min: 13.848550796509

SNAPAccuracy

../DCU/g12may.004.dat.1g s241t3.dat.digi1G

Average: 13.507763797500

Stdev: 2.615434646606 Max : 17.321367263794

Min : 9.172262191772

SNAPAccuracy

../DCU/g12may.004.dat.2g

s241t3.dat.digi2G

Average:

14.441895335554

Stdev: 2.821413516998 Max: 18.432174682617 Min : 9.736065864563

SNAPAccuracy

../DCU/g12may.004.dat.3g

s241t3.dat.digi3G

Average:

16.085508444223

Stdev: 2.753798484802 Max: 19.582908630371 Min : 11.464404106140

7.1.5 Stats.005

/usr1/figd/DIS2.2/dis lite3.

stats

Frames: 501

Average: 0.00103507 Maximum: 0.007019 2nd Max: 0.001483 Minimum: 0.000494

RateErr: 0

/usr1/figd/DIS2.2/dis lite4.

Frames: 502

Average: 0.00103141 Maximum: 0.00613 2nd Max: 0.001879 Minimum: 0.000494

RateErr: 0

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs: 21 Count: 20 Average: 2050.7 Maximum: 2538.07

2nd Max: 2531.65 Minimum: -107.434 Frames: 489862 Average: 0.000217611 Maximum: 0.010199 2nd Max: 0.010198 Minimum: 1.8e-05

PDUs from Net1: 17 PDUs from Net2: 21

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 17

Average: 0.0426695 Variance: 6.53301e-05 Maximum: 0.054278 2nd Max: 0.052696 Minimum: 0.028671

-- End Stats from CircularBuffer --

PDU Buffer 2

- Stats from CircularBuffer --

NumPass: 21 Average: 0.0505073 Variance: 0.000167107 Maximum: 0.074545

2nd Max: 0

Minimum: 0.025903

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.115484 Maximum: 1.765728 Minimum: 0.013062 Variance: 0.090626 Std Dev: 0.301041

SNAPTimes.pl

Sel-J Tss avg.:

0.00076193041759487574

Sel-J Tns avg.:

0.00034746520847168233

Sel-J Tnr avg.:

0.00055802186902901283

Sel-J Trs avg.:

0.00018099801175487941

Sel-J NIU avg.:

0.00094991650113074029

Sel-J Tgs avg.: 0 Sel-J Tar ava.:

0.00029541152916158037

DCUAccuracy j12may.005.dat.g

g12may.005.dat.ownship Average: 38.584397426018 Stdev: 26.366994857788 Max: 77.838874816895 Min : 12.500296592712

DCUAccuracyLite j12may.005.dat.g g12may.005.dat.ownship 60.0 Average: 12.736379794391

Stdev: 0.185560241342 Max: 13.544171333313 Min: 12.500296592712

DCUAccuracy g12may.005.dat.j

j12may.005.dat.ownship Average: 38.442479085441 Stdev: 25.716157913208 Max: 64.967277526855 Min: 12.881242752075

DCUAccuracyLite g12may.005.dat.j

j12may.005.dat.ownship 60.0 Average: 13.088355660913 Stdev: 0.176170215011 Max: 13.863429069519 Min: 12.881242752075

SNAPAccuracy

../DCU/j12may.005.dat.1j s211t3l.dat.digi1J fix Average: 5.802040089480 Stdev: 0.110245451331 Max: 6.047399997711 Min: 5.585000038147

SNAPAccuracy

../DCU/j12may.005.dat.2j s211t3l.dat.digi2J fix Average: 5.802040089480 Stdev: 0.110245451331 Max: 6.047399997711 Min: 5.585000038147

SNAPAccuracy

../DCU/j12may.005.dat.3j s211t3l.dat.digi3J fix Average: 8.777604868538 Stdev: 3.000212907791 Max: 12.008999824524 Min: 5.638000011444

SNAPAccuracy

../DCU/j12may.005.dat.1g s211t3l.dat.digi1G fix Average: 23.805767543917 Stdev: 0.110307663679 Max: 24.017000198364 Min: 23.586999893188

SNAPAccuracy

../DCU/j12may.005.dat.2g s211t3l.dat.digi2G fix Average: 29.801964034879 Stdev: 0.543057799339 Max: 30.017400741577 Min : 18.00000000000

SNAPAccuracy

../DCU/j12may.005.dat.3g s211t3l.dat.digi3G fix

Average:

26.753184217748

Stdev: 3.000936269760 Max: 30.009000778198 Min: 23.625000000000

SNAPAccuracy

../DCU/g12may.005.dat.1j s211t3l.dat.digi1J fix

Average:

23.823629929767

Stdev: 0.106356218457 Max: 24.038000106812 Min: 23.628000259399

SNAPAccuracy

../DCU/g12may.005.dat.2j s211t3l.dat.digi2J fix

Average:

23.823270723922

Stdev: 0.106165915728 Max: 24.038000106812 Min: 23.628000259399

SNAPAccuracy

../DCU/g12may.005.dat.3j s211t3l.dat.digi3J fix

Average:

23.828055750064

Stdev: 0.106208272278 Max: 24.039899826050 Min: 23.636999130249

SNAPAccuracy

../DCU/g12may.005.dat.1g s211t3l.dat.digi1G fix Average: 5.823042516284 Stdev: 0.106734730303 Max: 6.035000324249

Min : 5.627999782562

SNAPAccuracy

../DCU/g12may.005.dat.2g s211t3l.dat.digi2G fix Average: 5.823042516284 Stdev: 0.106734730303 Max: 6.035000324249

Min : 5.627999782562

SNAPAccuracy

../DCU/g12may.005.dat.3g s211t3l.dat.digi3G fix Average: 8.769429155690 Stdev: 3.001476764679 Max : 12.026000022888 Min : 5.625000000000

7.1.6 Stats.006

/usr1/figd/DIS2.2/dis_lite3.stats

Frames: 502

Average: 0.00143494 Maximum: 0.007909 2nd Max: 0.001483 Minimum: 0.000593

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 503 Average: 0.0013961 Maximum: 0.008107 2nd Max: 0.001681 Minimum: 0.000494

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 490 Count: 484 Average: 1953.61 Maximum: 3424.66 2nd Max: 3367 Minimum: -107.434

Frames: 362119 Average: 0.000223242 Maximum: 0.010791 2nd Max: 0.010198 Minimum: 1.8e-05

PDUs from Net1: 486 PDUs from Net2: 490

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 486 Average: 0.0459532 Variance: 0.000101633 Maximum: 0.081565 2nd Max: 0.072864 Minimum: 0.019575

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 490 Average: 0.0454566 Variance: 9.99583e-05 Maximum: 0.072073 2nd Max: 0.071579 Minimum: 0.015818

-- End Stats from CircularBuffer --

SNAPPdus.pl Average: 0.062114 Maximum: 4.311132 Minimum: 0.000016 Variance: 0.030249 Std Dev: 0.173921

SNAPTimes.pl Sel-J Tss avg.:

0.00070251195233053643

Sel-J Tns avg.:

0.00046370119543210882

Sel-J Tnr avg.:

0.00087070119529183347

Sel-J Trs avg.:

0.00040612748995204399

Sel-J NIU avg.:

0.0013716354582596021

Sel-J Tgs avg.: 0 Sel-J Tgr avg.:

0.00029541035691221465

DCUAccuracy j12may.006.dat.g g12may.006.dat.ownship Average: 25.534649737194 Stdev: 13.178560256958 Max: 51.818565368652 Min: 12.611504554749

DCUAccuracyLite j12may.006.dat.g

g12may.006.dat.ownship Average: 12.788105059796 Stdev: 0.160761967301 Max: 13.661871910095 Min: 12.611504554749

DCUAccuracy g12may.006.dat.j j12may.006.dat.ownship

Average: 37.499712364120 Stdev: 25.478868484497 Max: 64.975296020508 Min: 12.931170463562

DCUAccuracyLite g12may.006.dat.j

j12may.006.dat.ownship 37.0 Average: 13.095702724234 Stdev: 0.154081955552 Max: 13.907923698425 Min: 12.931170463562

SNAPAccuracy

../DCU/j12may.006.dat.1j

s221t3l.dat.digi1J

Average: 5.787452669874 Stdev: 0.111660271883 Max: 6.014999866486 Min: 5.566999912262 SNAPAccuracy

../DCU/j12may.006.dat.2j

s221t3l.dat.digi2J

Average: 8.932062283639 Stdev: 2.851941108704

Max : 12.006999969482 Min : 5.922999858856

SNAPAccuracy

../DCU/j12may.006.dat.3j

s221t3l.dat.digi3J

Average:

15.068219996748

Stdev: 2.603263616562 Max: 26.870477676392 Min: 2.034422159195

SNAPAccuracy

../DCU/j12may.006.dat.1g s221t3l.dat.digi1G

Average:

12.119582605748

Stdev: 6.315998077393 Max: 30.017400741577 Min: 5.566999912262

SNAPAccuracy

../DCU/j12may.006.dat.2g

s221t3l.dat.digi2G Average:

15.263515381678

Stdev: 8.920939445496 Max: 30.017400741577 Min: 5.920000076294

SNAPAccuracy

../DCU/j12may.006.dat.3g

s221t3l.dat.digi3G

Average:

21.212396908868

Stdev: 6.325122356415 Max: 66.850456237793 Min: 2.034422159195

SNAPAccuracyLite .../DCU/j12may.006.dat.3g

s221t3l.dat.digi3G 50.0

Average:

20.514629687301

Stdev: 3.178468465805 Max: 29.985471725464 Min: 2.034422159195

SNAPAccuracy

../DCU/g12may.006.dat.1j

s221t3l.dat.digi1J

Average:

14.978459039680

Stdev: 8.974286079407 Max: 24.008699417114

Min : 5.644000053406

SNAPAccuracy

../DCU/g12may.006.dat.2j

s221t3l.dat.digi2J

Average: 15.067464213622 Stdev: 8.740017890930 Max: 24.000000000000 Min: 6.0000000000000

SNAPAccuracy

../DCU/g12may.006.dat.3j

s221t3l.dat.digi3J

Average: 21.608523630903 Stdev: 6.183384895325 Max: 66.838302612305 Min: 2.751621007919

SNAPAccuracyLite

../DCU/g12may.006.dat.3j s221t3l.dat.digi3J 49.0 Average: 20.926279919138 Stdev: 3.070275306702

Max : 30.209039688110 Min : 2.751621007919

SNAPAccuracy

../DCU/g12may.006.dat.1g

s221t3l.dat.digi1G

Average: 5.807370185852 Stdev: 0.111377753317 Max: 6.037930011749 Min: 5.585000038147

SNAPAccuracy

../DCU/g12may.006.dat.2g

s221t3l.dat.digi2G

Average: 8.981531050897 Stdev: 2.823190450668 Max: 12.017000198364 Min: 5.993100166321

SNAPAccuracy

../DCU/g12may.006.dat.3g

s221t3l.dat.digi3G

Average: 15.120459654639 Stdev : 2.679242134094 Max : 26.870477676392 Min : 2.086434364319

7.1.7 Stats.007

/usr1/figd/DIS2.2/dis_lite3.stats

Frames: 503

Average: 0.00167824 Maximum: 0.011681 2nd Max: 0.006921 Minimum: 0.000791

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 503

Average: 0.00153196 Maximum: 0.007218 2nd Max: 0.007019 Minimum: 0.000692

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 958 Count: 923 Average: 2028.5 Maximum: 3378.38 2nd Max: 3367 Minimum: -348.23

Frames: 269056 Average: 0.00022344 Maximum: 0.010791 2nd Max: 0.010198 Minimum: 8.8e-05

PDUs from Net1: 953 PDUs from Net2: 958

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 953 Average: 0.0454135 Variance: 9.8175e-05 Maximum: 0.074446 2nd Max: 0.06891 Minimum: 0.01305

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 958 Average: 0.045174 Variance: 0.000103536 Maximum: 0.078401 2nd Max: 0.070096 Minimum: 0.01572

-- End Stats from CircularBuffer --

SNAPPdus.pl Average: 0.055740 Maximum: 1.678765 Minimum: 0.000015 Variance: 0.005322 Std Dev: 0.072950 SNAPTimes.pl Sel-J Tss avq.:

0.00069476294830307899

Sel-J Tns avg.:

0.00039823306759214586

Sel-J Tnr avg.:

0.0011653366538768345

Sel-J Trs avg.:

0.00048152589645822054

Sel-J NIU avg.:

0.0016002071716064825

Sel-J Tgs avg.: 0 Sel-J Tgr avg.:

0.00029541035691221465

DCUAccuracy j12may.007.dat.g g12may.007.dat.ownship

Average:

32.149915966295

Stdev: 19.406885147095 Max: 51.963935852051 Min: 12.563340187073

DCUAccuracyLite j12may.007.dat.g g12may.007.dat.ownship

37.0 Average:

12.744063688863

Stdev: 0.144675761461 Max: 13.429723739624 Min: 12.563340187073

DCUAccuracy g12may.007.dat.j j12may.007.dat.ownship

Average:

38.161089760642

Stdev: 25.357620239258 Max: 65.012290954590 Min: 12.881242752075

DCUAccuracyLite g12may.007.dat.j j12may.007.dat.ownship

37.0 Average:

13.114352863312

Stdev: 0.164804130793 Max: 13.854578971863 Min: 12.881242752075

SNAPAccuracy

../DCU/j12may.007.dat.1j

s231t3l.dat.digi1J

Average: 5.830018483013 Stdev: 0.108122862875 Max: 6.039899826050 Min : 5.608999729156

SNAPAccuracy

../DCU/j12may.007.dat.2j

s231t3l.dat.digi2J

Average: 13.667699995769 Stdev: 2.764295101166 Max: 18.605611801147 Min: 9.223019599915

SNAPAccuracy

../DCU/j12may.007.dat.3j

s231t3l.dat.digi3J

Average: 15.449115594228 Stdev: 2.701885938644 Max: 26.745962142944 Min: 9.797216415405

SNAPAccuracy

../DCU/j12may.007.dat.1g

s231t3l.dat.digi1G

Average: 20.783734909950 Stdev: 3.015010118484 Max: 24.028999328613 Min: 17.598999023438

SNAPAccuracy

../DCU/j12may.007.dat.2g

s231t3l.dat.digi2G

Average: 20.451573654529 Stdev: 6.349844455719 Max: 67.040184020996 Min: 13.131618499756

SNAPAccuracyLite

../DCU/j12may.007.dat.2g s231t3l.dat.digi2G 50.0 Average: 19.718804427835 Stdev: 2.714955568314 Max: 29.465866088867 Min: 13.131618499756

SNAPAccuracy

../DCU/j12may.007.dat.3g s231t3l.dat.digi3G

Average: 20.891920910779 Stdev: 3.578883886337

Max : 54.419406890869 Min : 13.618350982666

SNAPAccuracyLite

../DCU/j12may.007.dat.3g s231t3l.dat.digi3G 50.0 Average: 20.756174872788 Stdev : 2.890448570251 Max : 30.426210403442 Min : 13.618350982666 **SNAPAccuracy**

../DCU/g12may.007.dat.1j

s231t3l.dat.digi1J

Average: 23.723595015464 Stdev: 5.994712829590 Max: 30.025999069214 Min : 17.625000000000

SNAPAccuracy

../DCU/g12may.007.dat.2j

s231t3l.dat.digi2J

Average: 20.237592631771 Stdev: 4.689999103546 Max : 53.472755432129 Min: 13.154179573059

SNAPAccuracyLite

../DCU/g12may.007.dat.2i s231t3l.dat.digi2J 50.0 Average: 19.739941249128

Stdev: 2.642431735992 Max : 26.158189773560 Min : 13.154179573059

SNAPAccuracy

../DCU/g12may.007.dat.3i

s231t3l.dat.digi3J

Average: 21.520762585825 Stdev: 6.114418506622 Max: 66.968307495117 Min: 13.498728752136

SNAPAccuracyLite

../DCU/q12may.007.dat.3i s231t3l.dat.digi3J 50.0 Average: 20.871814131005 Stdev: 2.842680454254 Max : 28.815376281738 Min : 13.498728752136

SNAPAccuracy

../DCU/g12may.007.dat.1g

s231t3l.dat.digi1G

Average: 5.820389568566 Stdev: 0.108770854771 Max : 6.030999660492 Min : 5.608999729156

SNAPAccuracy

../DCU/g12may.007.dat.2g

s231t3l.dat.digi2G

Average: 13.915412793677 Stdev: 2.794693946838 Max : 18.758499145508 Min: 9.338224411011

SNAPAccuracy

../DCU/g12may.007.dat.3g

s231t3l.dat.digi3G

Average:

15.707282818944

Stdev: 2.677490234375 Max : 26.745962142944

7.1.8 Stats.008

/usr1/figd/DIS2.2/dis lite3.

stats

Frames: 503

Average: 0.00187433 Maximum: 0.006822 2nd Max: 0.00168 Minimum: 0.000792

RateErr: 0

/usr1/figd/DIS2.2/dis lite4.

stats

Frames: 503

Average: 0.00188061 Maximum: 0.006723 2nd Max: 0.00178 Minimum: 0.000692

RateErr: 0

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs : 1435 Count: 1239 Average: 1988.88 Maximum: 3401.36 2nd Max: 3378.38 Minimum: -9259.26

Frames: 365809 Average: 0.000224277 Maximum: 0.010692 2nd Max: 0.010594 Minimum: 1.8e-05

PDUs from Net1: 1433 PDUs from Net2: 1435

PDU Buffer 1 -- Stats from

CircularBuffer ---

NumPass: 1433 Average: 0.0456913 Variance: 9.6049e-05 Maximum: 0.08107 2nd Max: 0.07327

Minimum: 0.015621 -- End Stats from CircularBuffer ---

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 1435 Average: 0.0457335 Variance: 0.000103087 Maximum: 0.078896 2nd Max: 0.071579 Minimum: 0.016411

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.064835 Maximum: 8.025830 Minimum: 0.000016 Variance: 0.053073 Std Dev: 0.230376

SNAPTimes.pl

Sel-J Tss avg.:

0.00070309561762037644

Sel-J Tns avg.:

0.00039857968122631579

Sel-J Tnr avg.:

0.0013841015932709536

Sel-J Trs avg.:

0.00053016533887879252

Sel-J NIU avg.:

0.0018185916330015557

Sel-J Tgs avg.: 0 Sel-J Tgr avg.:

0.00029541035691221465

DCUAccuracy j12may.008.dat.g

g12may.008.dat.ownship Average: 21.109271783239 Stdev: 16.368478775024 Max : 51.997383117676 Min : 0.133240386844

DCUAccuracyLite j12may.008.dat.g g12may.008.dat.ownship 37.0 Average: 12.412100234202

Stdev: 1.791377186775 Max: 19.215353012085 Min: 0.133240386844

DCUAccuracy g12may.008.dat.i

j12may.008.dat.ownship Average: 21.872918856892 Stdev: 17.094011306763 Max : 64.822814941406 Min : 0.120104119182

DCUAccuracyLite g12may.008.dat.i

j12may.008.dat.ownship 37.0 Average: 12.854826587097 Stdev: 1.732030034065 Max: 19.600521087646 Min : 0.120104119182

SNAPAccuracy

../DCU/j12may.008.dat.1j

s241t3l.dat.digi1J

Average: 13.412120671339 Stdev: 2.871634244919 Max: 22.777051925659 Min: 8.493501663208

SNAPAccuracy

../DCU/j12may.008.dat.2j

s241t3l.dat.digi2J

Average: 14.426481494481 Stdev : 2.947359323502 Max : 19.426872253418 Min : 9.487757682800

SNAPAccuracy

../DCU/j12may.008.dat.3j

s241t3l.dat.digi3J

Average: 16.014205535413 Stdev: 2.921976566315 Max: 26.924356460571 Min: 8.870583534241

SNAPAccuracy

../DCU/j12may.008.dat.1g

s241t3l.dat.digi1G

Average: 20.412187930791 Stdev: 6.662631988525 Max: 66.907875061035 Min: 9.673400878906

SNAPAccuracyLite

../DCU/j12may.008.dat.1g s241t3l.dat.digi1G 50.0 Average: 19.671079580789 Stdev : 3.309219360352 Max : 45.358081817627

Min : 9.673400878906

SNAPAccuracy

../DCU/j12may.008.dat.2g

s241t3l.dat.digi2G

Average: 20.960277014068 Stdev: 6.439024925232 Max: 66.907875061035 Min: 9.540347099304

SNAPAccuracyLite

../DCU/j12may.008.dat.2g s241t3l.dat.digi2G 50.0 Average: 20.228172180834 Stdev : 2.965450286865 Max : 29.995618820190

Min: 9.540347099304

SNAPAccuracy /DCII/i12may (

../DCU/j12may.008.dat.3g

s241t3l.dat.digi3G

Average:

21.759803264247

Stdev: 6.300636768341 Max: 66.913841247559 Min: 9.509954452515

SNAPAccuracyLite

../DCU/j12may.008.dat.3g s241t3l.dat.digi3G 37.0

Average:

21.062206874659

Stdev: 3.077651262283 Max: 34.051086425781 Min: 9.509954452515

SNAPAccuracy

../DCU/g12may.008.dat.1j

s241t3l.dat.digi1J

Average:

20.261366248853

Stdev: 5.837355136871 Max: 66.920265197754 Min: 13.095389366150

SNAPAccuracyLite

../DCU/g12may.008.dat.1j s241t3l.dat.digi1J 50.0

Average:

19.717001012010

Stdev: 3.122595071793
Max: 45.358081817627
Min: 13.095389366150

SNAPAccuracy

../DCU/g12may.008.dat.2j s241t3l.dat.digi2J

Average:

21.108446134702

Stdev: 6.535653114319 Max: 66.995758056641

Min : 13.301776885986

SNAPAccuracyLite

../DCU/g12may.008.dat.2j s241t3l.dat.digi2J 50.0

Average:

20.384015204725

Stdev: 3.260656118393 Max: 45.358116149902

Min: 13.301776885986

SNAPAccuracy

../DCU/g12may.008.dat.3j

s241t3l.dat.digi3J

Average:

21.940877267086

Stdev: 6.482801914215 Max: 66.995758056641

Min : 13.198332786560

SNAPAccuracyLite

../DCU/g12may.008.dat.3j s241t3l.dat.digi3J 50.0 Average: 21.223982570108 Stdev : 3.275703430176 Max : 45.358146667480

Min : 13.198332786560

SNAPAccuracy

../DCU/g12may.008.dat.1g

s241t3l.dat.digi1G

Average: 13.643155622674 Stdev: 2.875773191452 Max: 18.768186569214 Min: 9.141060829163

SNAPAccuracy

../DCU/g12may.008.dat.2g

s241t3l.dat.digi2G

Average: 14.727733681001 Stdev: 3.004245281219 Max: 19.661333084106 Min: 9.341915130615

SNAPAccuracy

../DCU/g12may.008.dat.3g

s241t3l.dat.diqi3G

Average: 16.236358824504 Stdev : 2.939290523529 Max : 26.924356460571 Min : 8.861981391907

7.1.9 Stats.009

/usr1/figd/DIS2.2/dis_lite3.stats

Frames: 501

Average: 0.00110123 Maximum: 0.010989 2nd Max: 0.007612 Minimum: 0.000593

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 501

Average: 0.00107451 Maximum: 0.00781 2nd Max: 0.001285 Minimum: 0.000494

RateErr: 0

/sq16/usr1/nets/DISNET/disnet7.stats

PDUs : 22 Count : 20

Average: 1895.53 Maximum: 2531.65 2nd Max: 2531.65 Minimum: -107.434

Frames: 1196489 Average: 0.000220851 Maximum: 0.010199 2nd Max: 0.010198 Minimum: 1.8e-05

PDUs from Net1: 17 PDUs from Net2: 22

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 17 Average: 0.0434719 Variance: 8.88006e-05 Maximum: 0.063175 2nd Max: 0.052992 Minimum: 0.026891

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 22 Average: 0.0442434 Variance: 0.000100043 Maximum: 0.065647 2nd Max: 0.059418 Minimum: 0.023925

-- End Stats from CircularBuffer --

SNAPPdus.pl Average: 0.128841 Maximum: 2.902899 Minimum: 0.002836 Variance: 0.209291 Std Dev: 0.457484

SNAPTimes.pl Sel-J Tss avg.: 0.0007395776891902338 Sel-J Tns avg.:

0.00033810956184348776

Sel-J Tnr avg.:

0.0005770278883834956

Sel-J Trs avg.:

0.00018592629475826101

Sel-J NIU avg.:

0.00096852589644207826

Sel-J Tgs avg.: 0 Sel-J Tgr avg.:

0.00029541035691221465

DCUAccuracy g12may.009.dat.j j12may.009.dat.ownship

Average:

19.745418953154

Stdev: 18.679857254028 Max: 38.976356506348 Min: 0.026907248423

DCUAccuracyLite g12may.009.dat.j j12may.009.dat.ownship

37.0

Average: 1.231686334282 Stdev: 1.070141077042 Max: 3.590488433838 Min: 0.026907248423

DCUAccuracy j12may.009.dat.g

q12may.009.dat.ownship

Average:

13.858979374140

Stdev: 12.861098289490 Max: 38.896610260010 Min: 0.126063480973

DCUAccuracyLite j12may.009.dat.g g12may.009.dat.ownship

24.0 Average: 1.290587235586 Stdev: 1.050558924675 Max: 3.566061735153 Min: 0.126063480973

SNAPAccuracy

../DCU/j12may.009.dat.1j s211t3dl.dat.digi1J

Average: 0.184039113436 Stdev: 0.107354767621 Max: 0.384000003338 Min: 0.0000000000000

SNAPAccuracy ../DCU/j12may.009.dat.2j

s211t3dl.dat.digi2J

Average: 0.184039113436 Stdev: 0.107354767621 Max: 0.384000003338 Min: 0.0000000000000

SNAPAccuracy

../DCU/j12may.009.dat.3j s211t3dl.dat.diqi3J

Average: 2.964432268084

Stdev: 2.812803983688 Max: 6.0000000000000 Min: 0.0000000000000 **SNAPAccuracy**

../DCU/j12may.009.dat.1g s211t3dl.dat.digi1G

Average: 17.816312546179 Stdev: 0.107048235834 Max: 18.010200500488 Min: 17.614999771118

SNAPAccuracy

../DCU/j12may.009.dat.2g

s211t3dl.dat.digi2G

Average: 20.858908941489 Stdev : 2.997768878937 Max : 24.010200500488 Min : 17.625000000000

SNAPAccuracy

../DCU/j12may.009.dat.3g

s211t3dl.dat.digi3G

Average: 20.858908941489 Stdev : 2.997768878937 Max : 24.010200500488 Min : 17.625000000000

SNAPAccuracy

../DCU/g12may.009.dat.1j s211t3dl.dat.digi1J

Average: 17.871401061393 Stdev: 5.992495536804 Max: 24.000000000000 Min: 11.494999885559

SNAPAccuracy

../DCU/g12may.009.dat.2j s211t3dl.dat.digi2J

Average: 17.881966971964 Stdev: 6.002951622009 Max: 24.017400741577 Min: 11.494999885559

SNAPAccuracy

../DCU/g12may.009.dat.3j

s211t3dl.dat.digi3J

Average: 20.760252343230 Stdev: 3.015708446503 Max: 24.031000137329 Min: 17.602199554443

SNAPAccuracy

../DCU/g12may.009.dat.1g

s211t3dl.dat.digi1G

Average: 0.209575000332 Stdev: 0.110076569021 Max: 0.517000019550 Min: 0.0000000000000 **SNAPAccuracy**

../DCU/g12may.009.dat.2g

s211t3dl.dat.digi2G

Average: 0.209575000332 Stdev: 0.110076569021 Max : 0.517000019550 Min : 0.000000000000

SNAPAccuracy

../DCU/g12may.009.dat.3g

s211t3dl.dat.digi3G

Average: 2.993972173456 Stdev: 2.802256822586 Max : 6.027999877930 Min : 0.000000000000

7.1.10 Stats.010

/usr1/figd/DIS2.2/dis lite3.stats

Frames: 503

Average: 0.00146806 Maximum: 0.006031 2nd Max: 0.003065 Minimum: 0.000692

RateErr: 0

/usr1/figd/DIS2.2/dis lite4.stats

Frames: 502 Average: 0.00134157 Maximum: 0.006031 2nd Max: 0.005734 Minimum: 0.000494

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 489 Count: 480 Average: 1885.61 Maximum: 5181.35 2nd Max: 3367 Minimum: -4830.92

Frames: 317097 Average: 0.000220739 Maximum: 0.010199 2nd Max: 0.010198 Minimum: 1.9e-05

PDUs from Net1: 486 PDUs from Net2: 489

PDU Buffer 1

- Stats from CircularBuffer -

NumPass: 486 Average: 0.0451373 Variance: 8.60412e-05

Maximum: 0.077412 2nd Max: 0.069997 Minimum: 0.019674 - End Stats from CircularBuffer --

PDU Buffer 2 -- Stats from CircularBuffer --NumPass: 489 Average: 0.0449855 Variance: 0.000100702 Maximum: 0.075732 2nd Max: 0.071185 Minimum: 0.017697 -- End Stats from

SNAPPdus.pl

CircularBuffer --

Average: 0.059375 Maximum: 2.253697 Minimum: 0.000155 Variance: 0.012946 Std Dev: 0.113781

SNAPTimes.pl Sel-J Tss avg.:

0.00069819322695739499

Sel-J Tns avg.:

0.00047915139401018936

Sel-J Tnr avg.:

0.00089847211159238842

Sel-J Trs avg.:

0.00016581474103504769

Sel-J NIU avg.:

0.001416207170973122

Sel-J Tgs avg.: 0 Sel-J Tgr avg.:

0.00029541035691221465

DCUAccuracy j12may.010.dat.g g12may.010.dat.ownship

Average:

25.872421446497

Stdev: 24.687618255615 Max : 51.977390289307 Min : 0.155080616474

DCUAccuracyLite i12may.010.dat.q g12may.010.dat.ownship

31.0 Average: 1.510097757638 Stdev: 1.224033355713 Max : 6.748218059540

Min : 0.155080616474

DCUAccuracy g12may.010.dat.i

j12may.010.dat.ownship Average: 25.848406382318 Stdev: 24.733167648315 Max : 52.027210235596 Min : 0.060671247542

DCUAccuracyLite g12may.010.dat.i

j12may.010.dat.ownship 31.0 Average: 1.547800250604 Stdev: 1.897289633751 Max : 12.884175300598 Min : 0.060671247542

SNAPAccuracy

../DCU/i12may.010.dat.1i

s221t3dl.dat.digi1J

Average: 0.187677733505 Stdev: 0.165580689907 Max : 2.967300176620 Min : 0.000000000000

SNAPAccuracy

../DCU/j12may.010.dat.2j

s221t3dl.dat.digi2J

Average: 0.155799798468 Stdev: 0.164196878672 Max : 2.967300176620 Min : 0.000000000000

SNAPAccuracy

../DCU/j12may.010.dat.3j

s221t3dl.dat.digi3J

Average: 7.298403700112 Stdev: 2.583430528641 Max : 19.729475021362 Min : 0.580304265022

SNAPAccuracy

../DCU/j12may.010.dat.1g

s221t3dl.dat.digi1G

Average: 11.065643023033 Stdev: 8.539328575134 Max : 18.017000198364 Min: 0.075699999928

SNAPAccuracy

../DCU/j12may.010.dat.2g

s221t3dl.dat.digi2G

Average: 10.287453212704 Stdev: 8.235536575317 Max : 18.017000198364 Min : 0.00000000000

SNAPAccuracy

../DCU/j12may.010.dat.3g

s221t3dl.dat.digi3G

Average: 17.720593434039 Stdev: 6.107871532440

Max : 50.286647796631 Min : 3.230757951736

SNAPAccuracyLite ../DCU/j12may.010.dat.3g s221t3dl.dat.digi3G 49.0 Average: 17.184592953398 Stdev: 4.500429630280 Max: 30.096109390259 Min: 3.230757951736

SNAPAccuracy

../DCU/g12may.010.dat.1j s221t3dl.dat.digi1J

Average: 11.041095719356 Stdev: 8.584774017334 Max: 18.039999008179 Min: 0.001200000057

SNAPAccuracy

../DCU/g12may.010.dat.2j s221t3dl.dat.digi2J

Average: 8.118052859844 Stdev: 6.468938350677 Max: 18.017400741577 Min: 0.063000001013

SNAPAccuracy

../DCU/g12may.010.dat.3j s221t3dl.dat.digi3J

Average: 17.337564362743 Stdev: 5.928356170654 Max: 50.369430541992 Min: 3.275687694550

SNAPAccuracyLite ../DCU/g12may.010.dat.3j s221t3dl.dat.digi3J 49.0 Average: 16.794382295333 Stdev: 4.192945003510 Max: 41.318946838379

Min : 3.275687694550

SNAPAccuracy

../DCU/g12may.010.dat.1g s221t3dl dat digi1G

s221t3dl.dat.digi1G Average: 0.157290283980

Stdev: 0.209703490138

Max: 3.088500022888

Min: 0.0000000000000

SNAPAccuracy

../DCU/g12may.010.dat.2g

s221t3dl.dat.digi2G Average: 0.187100202819

Stdev: 0.210639238358

Max: 3.088500022888

Min: 0.0000000000000

SNAPAccuracy

../DCU/g12may.010.dat.3g

s221t3dl.dat.digi3G

Average: 7.979004476958 Stdev: 2.051180601120 Max: 15.198519706726 Min: 0.580304265022

7.1.11 Stats.011

/usr1/figd/DIS2.2/dis_lite3.

stats

Frames: 503

Average: 0.00165878 Maximum: 0.005734 2nd Max: 0.002768 Minimum: 0.000593

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.

stats

Frames: 503

Average: 0.00158597 Maximum: 0.005833 2nd Max: 0.005734 Minimum: 0.000494

RateErr: 0

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs : 951 Count : 875 Average: 1874.78 Maximum: 3378.38 2nd Max: 3367 Minimum: -142857

Frames: 266184 Average: 0.000222954 Maximum: 0.010198 2nd Max: 0.010198 Minimum: 1.9e-05

PDUs from Net1: 947 PDUs from Net2: 951

PDU Buffer 1
-- Stats from
CircularBuffer --

NumPass: 947 Average: 0.0454604 Variance: 0.000103903 Maximum: 0.072864 2nd Max: 0.070393

Minimum: 0.001384

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 951 Average: 0.0460627 Variance: 9.95857e-05 Maximum: 0.076226 2nd Max: 0.075929 Minimum: 0.018982

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.055217 Maximum: 1.151230 Minimum: 0.000015 Variance: 0.002806 Std Dev: 0.052967

SNAPTimes.pl

Sel-J Tss avg.:

0.00071825099616419099

Sel-J Tns avg.:

0.00039131673302434652

Sel-J Tnr avg.:

0.0011766155381859522

Sel-J Trs avg.:

0.00022476095585287012

Sel-J NIU avg.:

0.0016047649405084075

Sel-J Tgs avg.: 0 Sel-J Tgr avg.:

0.00029541035691221465

DCUAccuracy j12may.011.dat.g

g12may.011.dat.ownship Average: 19.912383895247 Stdev: 18.694179534912 Max: 39.063587188721 Min: 0.145055159926

DCUAccuracyLite j12may.011.dat.g g12may.011.dat.ownship 37.0 Average: 1.308683771685

Stdev: 1.042683005333 Max: 3.566061735153 Min: 0.145055159926

DCUAccuracy g12may.011.dat.j

j12may.011.dat.ownship Average: 25.841888379463 Stdev: 24.822229385376 Max: 52.006423950195 Min: 0.040459856391

DCUAccuracyLite g12may.011.dat.j j12may.011.dat.ownship 37.0 Average: 1.234783582015

Stdev: 1.070656418800

Max : 3.598483800888 Min : 0.040459856391

SNAPAccuracy

../DCU/j12may.011.dat.1j s231t3dl.dat.digi1J

Average: 0.186771515114

Stdev: 0.106867693365 Max: 0.414000004530 Min: 0.0000000000000

SNAPAccuracy

../DCU/j12may.011.dat.2j

s231t3dl.dat.digi2J

Average: 5.592821489199 Stdev: 2.089976787567 Max: 10.230733871460 Min: 0.580304265022

SNAPAccuracy

../DCU/j12may.011.dat.3j s231t3dl.dat.digi3J

Average: 8.014827339095

Stdev: 1.959895730019 Max: 15.111941337585 Min: 0.580304265022

SNAPAccuracy

../DCU/j12may.011.dat.1g s231t3dl.dat.digi1G

Average: 23.795029262984 Stdev: 0.385479599237 Max: 24.025501251221 Min: 17.979000091553

SNAPAccuracy

../DCU/j12may.011.dat.2g

s231t3dl.dat.digi2G

Average: 17.090915131037 Stdev: 5.635063171387 Max: 50.199264526367 Min: 2.077795267105

SNAPAccuracyLite ../DCU/j12may.011.dat.2g s231t3dl.dat.digi2G 50.0 Average: 16.683988426745 Stdev: 4.305715560913

Max : 30.043367385864 Min : 2.077795267105

SNAPAccuracy

../DCU/j12may.011.dat.3g

s231t3dl.dat.digi3G

Average: 17.415890023868 Stdev: 5.954683303833 Max: 50.369430541992 Min: 3.617517709732 SNAPAccuracyLite

../DCU/j12may.011.dat.3g s231t3dl.dat.digi3G 50.0

Average:

16.875621620159

Stdev: 4.249145030975 Max: 29.397096633911 Min: 3.617517709732

SNAPAccuracy

../DCU/g12may.011.dat.1j

s231t3dl.dat.digi1J Average:

11.799247482486

Stdev: 0.108537457883 Max: 12.018899917603 Min: 11.564999580383

SNAPAccuracy

../DCU/g12may.011.dat.2j s231t3dl.dat.digi2J

Average:

17.324403121554

Stdev: 6.903989791870 Max: 66.964469909668 Min: 2.790605306625

SNAPAccuracyLite

../DCU/g12may.011.dat.2j s231t3dl.dat.digi2J 50.0

Average:

16.680099570702

Stdev: 4.275980949402 Max: 26.688489913940 Min: 2.790605306625

SNAPAccuracy

../DCU/g12may.011.dat.3j s231t3dl.dat.digi3J

Average:

17.281203469688

Stdev: 4.838991165161 Max: 41.243148803711

Min : 3.664297342300

SNAPAccuracyLite ../DCU/g12may.011.dat.3j s231t3dl.dat.digi3J 32.0

Average:

16.930940249445

Stdev: 4.211304664612 Max: 27.933872222900

Min : 3.664297342300

SNAPAccuracy

../DCU/g12may.011.dat.1g

s231t3dl.dat.digi1G

Average: 0.181951515855 Stdev: 0.107692599297 Max : 0.41799982834 Min : 0.000000000000

SNAPAccuracy

../DCU/g12may.011.dat.2g

s231t3dl.dat.digi2G

Average: 5.522573684201 Stdev: 2.102588176727 Max: 10.219282150269 Min: 0.580304265022

SNAPAccuracy

../DCU/g12may.011.dat.3g

s231t3dl.dat.digi3G

Average: 8.245267763282 Stdev: 1.731142163277 Max: 15.111941337585 Min: 0.580304265022

7.1.12 Stats.012

/usr1/figd/DIS2.2/dis_lite3.stats

Frames: 502

Average: 0.00199944 Maximum: 0.01178 2nd Max: 0.007218 Minimum: 0.000593

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 503

Average: 0.00190893 Maximum: 0.01178 2nd Max: 0.005635 Minimum: 0.000593

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 1418 Count: 1286 Average: 2034.16 Maximum: 3401.36 2nd Max: 3378.38 Minimum: -3246.75

Frames: 214082 Average: 0.000228999 Maximum: 0.011286 2nd Max: 0.010692 Minimum: 5.8e-05

PDUs from Net1: 1414 PDUs from Net2: 1419 PDU Buffer 1

-- Stats from CircularBuffer -- NumPass: 1414 Average: 0.0450699 Variance: 0.000100486 Maximum: 0.078302 2nd Max: 0.074644

Minimum: 0.012853

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer -- NumPass: 1419
Average: 0.0453548
Variance: 0.000106032
Maximum: 0.078796
2nd Max: 0.074644
Minimum: 0.010776

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.050983 Maximum: 1.213660 Minimum: 0.000016 Variance: 0.001228 Std Dev: 0.035042

SNAPTimes.pl Sel-J Tss avg.:

0.00070370717139486079

Sel-J Tns avg.:

0.00039627290837767264

Sel-J Tnr avg.:

0.0014942908364248858

Sel-J Trs avg.:

0.0001831274898270557

Sel-J NIU avg.:

0.0019425298802719722

Sel-J Tgs avg.: 0 Sel-J Tgr avg.:

0.00029541035691221465

DCUAccuracy j12may.012.dat.g g12may.012.dat.ownship Average: 20.140414573809 Stdev: 19.186073303223 Max: 51.895042419434

Min : 0.136297464371

DCUAccuracyLite j12may.012.dat.g g12may.012.dat.ownship 37.0

Average: 1.292170743227 Stdev: 1.047949671745 Max: 3.566013097763 Min: 0.136297464371

DCUAccuracy g12may.012.dat.j j12may.012.dat.ownship Average: 19.823196694237 Stdev: 18.676670074463 Max: 39.019554138184 Min: 0.007280109916

DCUAccuracyLite g12may.012.dat.j j12may.012.dat.ownship

37.0

Average: 1.237730153558 Stdev: 1.068549752235 Max: 3.590488433838 Min: 0.007280109916

SNAPAccuracy ../DCU/j12may.012.dat.1j s241t3dl.dat.digi1J

Average: 4.690930006600 Stdev: 1.251057744026 Max: 10.165618896484 Min: 0.580298841000

SNAPAccuracy

../DCU/j12may.012.dat.2j s241t3dl.dat.digi2J

Average: 5.360097022490 Stdev: 2.067842245102 Max: 10.128942489624

Min : 0.580304265022

SNAPAccuracy

../DCU/j12may.012.dat.3j s241t3dl.dat.digi3J

Average: 8.107780636200 Stdev: 1.788450360298 Max: 15.111941337585 Min: 0.580304265022

SNAPAccuracy

../DCU/j12may.012.dat.1g s241t3dl.dat.digi1G

Average:

16.412862810178

Stdev: 5.459205627441 Max: 50.274219512939 Min: 2.017177581787

SNAPAccuracyLite ../DCU/j12may.012.dat.1g s241t3dl.dat.digi1G 50.0 Average:

16.066178082441

Stdev: 4.275761604309 Max: 29.991474151611 Min: 2.017177581787

SNAPAccuracy ../DCU/j12may.012.dat.2g s241t3dl.dat.digi2G Average: 16.721802887520 Stdev: 5.781748294830 Max: 50.351913452148 Min: 3.314923763275

SNAPAccuracyLite

../DCU/j12may.012.dat.2g s241t3dl.dat.digi2G 50.0 Average: 16.239783487202 Stdev : 4.188841819763 Max : 28.728935241699 Min : 3.314923763275

SNAPAccuracy

../DCU/j12may.012.dat.3g

s241t3dl.dat.digi3G

Average: 17.380264961695 Stdev: 5.777895927429 Max: 50.351913452148 Min: 3.813025712967

SNAPAccuracyLite

../DCU/j12may.012.dat.3g s241t3dl.dat.digi3G 50.0 Average: 16.907729583022 Stdev : 4.258968830109 Max : 29.991474151611 Min : 3.813025712967

SNAPAccuracy

../DCU/g12may.012.dat.1j s241t3dl.dat.digi1J

Average: 16.524939040343 Stdev: 5.337262630463 Max: 50.274215698242 Min: 2.051762104034

SNAPAccuracyLite

../DCU/g12may.012.dat.1j s241t3dl.dat.digi1J 40.0 Average: 16.128004238439 Stdev: 3.972641468048 Max: 26.217031478882 Min: 2.051762104034

SNAPAccuracy

../DCU/g12may.012.dat.2j s241t3dl.dat.digi2J

Average: 16.961869485480 Stdev: 5.800815105438 Max: 50.274219512939 Min: 3.568493843079

SNAPAccuracyLite ../DCU/g12may.012.dat.2i

s241t3dl.dat.digi2J 40.0 Average: 16.432598617396 Stdev: 4.098531723022 Max: 29.221561431885 Min: 3.568493843079

SNAPAccuracy

../DCU/g12may.012.dat.3j

s241t3dl.dat.digi3J

Average: 17.313660683061 Stdev: 5.746165275574 Max: 50.274219512939 Min: 3.876214265823

SNAPAccuracyLite ../DCU/g12may.012.dat.3j s241t3dl.dat.digi3J 40.0 Average: 16.790192430536 Stdev: 4.066074848175 Max: 28.486944198608

SNAPAccuracy

../DCU/g12may.012.dat.1g

Min : 3.876214265823

s241t3dl.dat.digi1G

Average: 4.811016821982 Stdev: 1.459100723267 Max: 10.246307373047 Min: 0.580318868160

SNAPAccuracy

../DCU/g12may.012.dat.2g

s241t3dl.dat.digi2G

Average: 5.797069083320 Stdev: 2.231092691422 Max: 10.110716819763 Min: 0.580304265022

SNAPAccuracy

../DCU/g12may.012.dat.3g

s241t3dl.dat.digi3G

Average: 8.285531019683 Stdev: 1.625078439713 Max: 15.111941337585 Min: 0.580304265022

7.1.13 Stats.013

/usr1/figd/DIS2.2/dis4.stats

Frames: 502

Average: 0.00104431 Maximum: 0.01089 2nd Max: 0.006822 Minimum: 0.000692

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 502

Average: 0.00102695 Maximum: 0.011286 2nd Max: 0.00702 Minimum: 0.000789

RateErr: 0

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs : 19 Count : 19

Average: 1796.62 Maximum: 2531.65 2nd Max: 2525.25 Minimum: -105.197

Frames: 514333 Average: 0.000226212 Maximum: 0.010199 2nd Max: 0.010198 Minimum: 5.8e-05

PDUs from Net1: 15 PDUs from Net2: 19

PDU Buffer 1
-- Stats from
CircularBuffer -NumPass: 15

Average: 0.0462233
Variance: 0.000131546
Maximum: 0.069206
2nd Max: 0.06021
Minimum: 0.028573
-- End Stats from
CircularBuffer --

PDU Buffer 2

Stats fromCircularBuffer --NumPass: 19

Average: 0.0464054
Variance: 7.62734e-05
Maximum: 0.058232
2nd Max: 0.055266
Minimum: 0.026397
-- End Stats from

CircularBuffer --

SNAPPdus.pl

Average: 0.049163 Maximum: 0.072454 Minimum: 0.028658 Variance: 0.000107 Std Dev: 0.010331

SNAPTimes.pl Sel-J Tss avg.:

0.00068279880508771208

Sel-J Tns avg.:

0.00036240836679174811

Sel-J Tnr avg.:

0.00053900597595926962

Sel-J Trs avg.:

0.00040812151382127183

Sel-J NIU avg.:

0.00095934860575972011

Sel-J Tgs avg.: 0 Sel-J Tgr avg.:

0.00029541035691221465

DCUAccuracy j12may.013.dat.g

g12may.013.dat.ownship Average: 1.098822626999 Stdev: 0.956431269646 Max: 4.890170097351 Min: 0.044407207519

DCUAccuracy g12may.013.dat.j

j12may.013.dat.ownship Average: 1.002986137757 Stdev: 0.982555687428 Max: 4.720283985138 Min: 0.037483330816

SNAPAccuracy

../DCU/j12may.013.dat.1j

s211t3d.dat.digi1J

Average: 0.242579237644 Stdev : 0.107643231750 Max : 0.442999988794 Min : 0.024390000850

SNAPAccuracy

../DCU/j12may.013.dat.2j

s211t3d.dat.digi2J

Average: 0.097202128637 Stdev: 0.061753474176 Max: 0.246000006795 Min: 0.0000000000000

SNAPAccuracy

../DCU/j12may.013.dat.3j

s211t3d.dat.digi3J

Average: 0.334893554299 Stdev: 0.109197154641 Max: 0.541999995708 Min: 0.119999997318

SNAPAccuracy

../DCU/j12may.013.dat.1g

s211t3d.dat.digi1G

Average: 0.245896142127 Stdev: 0.107204712927 Max: 0.446999996901 Min: 0.024390000850

SNAPAccuracy

../DCU/j12may.013.dat.2g

s211t3d.dat.digi2G

Average: 0.096582666785 Stdev: 0.061311583966 Max : 0.244000002742 Min : 0.00000000000

SNAPAccuracy

../DCU/j12may.013.dat.3g s211t3d.dat.digi3G

Average: 0.096582666785 Stdev: 0.061311583966 Max : 0.244000002742 Min : 0.000000000000

SNAPAccuracy

../DCU/g12may.013.dat.1j s211t3d.dat.digi1J

Average: 0.168739899821 Stdev: 0.105414934456 Max : 0.367000013590 Min : 0.000399999990

SNAPAccuracy

../DCU/g12may.013.dat.2j s211t3d.dat.digi2J

Average: 0.123496646535 Stdev: 0.086774647236 Max : 0.326999992132 Min : 0.000000000000

SNAPAccuracy

../DCU/g12may.013.dat.3j

s211t3d.dat.digi3J

Average: 0.412073890649 Stdev: 0.109536267817 Max : 0.624000012875 Min : 0.195999994874

SNAPAccuracy

../DCU/g12may.013.dat.1g s211t3d.dat.digi1G

Average: 0.165264619328 Stdev: 0.105229541659 Max : 0.363000005484 Min : 0.000399999990

SNAPAccuracy

../DCU/g12may.013.dat.2g

s211t3d.dat.digi2G

Average: 0.125587329466 Stdev: 0.088479965925 Max : 0.355000019073 Min : 0.000000000000

SNAPAccuracy

../DCU/g12may.013.dat.3g s211t3d.dat.digi3G

Average: 0.414386324914 Stdev: 0.109694190323 Max : 0.624000012875

Min : 0.20000002980

7.1.14 Stats.014

/usr1/figd/DIS2.2/dis4.stats

Frames: 502

Average: 0.00142554 Maximum: 0.011285 2nd Max: 0.005634 Minimum: 0.000593

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 501

Average: 0.0016685 Maximum: 0.006031 2nd Max: 0.002471 Minimum: 0.000494

RateErr: 0

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs : 513 Count : 505 Average: 1861.7 Maximum: 3367 2nd Max: 3367 Minimum: -9259.26

Frames: 196929 Average: 0.000232708 Maximum: 0.01079 2nd Max: 0.010198 Minimum: 8.9e-05

PDUs from Net1: 510 PDUs from Net2: 513

PDU Buffer 1 - Stats from

CircularBuffer ---NumPass: 510 Average: 0.0454565 Variance: 0.000106168 Maximum: 0.0785 2nd Max: 0.067525 Minimum: 0.017104

-- End Stats from CircularBuffer ---

PDU Buffer 2 Stats from CircularBuffer --NumPass: 513 Average: 0.0452727 Variance: 0.000116542 Maximum: 0.076325 2nd Max: 0.075943 Minimum: 0.014929

- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.050477 Maximum: 0.084492 Minimum: 0.013761 Variance: 0.000113 Std Dev: 0.010626

SNAPTimes.pl s221t3d.dat |

SNAPCodeTimes.pl Sel-J Tss avg.:

0.00068022310780175774

Sel-J Tns avg.:

0.000433669323045983

Sel-J Tnr avg.:

0.001105073704980258

Sel-J Trs avg.:

0.00018611952198777844

Sel-J NIU avg.:

0.0015733645416611149

Sel-J Tas ava.: 0 Sel-J Tgr avg.:

0.00029541035691221465

DCUAccuracy j12may.014.dat.g

g12may.014.dat.ownship Average: 1.149893570902 Stdev: 0.980801165104 Max : 5.368845939636 Min : 0.088459029794

DCUAccuracy g12may.014.dat.i

i12may.014.dat.ownship Average: 1.005955734940 Stdev: 0.983893990517 Max : 4.853922367096 Min : 0.060802958906

SNAPAccuracy

../DCU/j12may.014.dat.1j

s221t3d.dat.digi1J

Average: 0.174419878714 Stdev: 0.105829529464 Max : 0.377000004053 Min : 0.000899999985

SNAPAccuracy

../DCU/j12may.014.dat.2j s221t3d.dat.digi2J

Average: 0.124476003971 Stdev: 0.087537355721 Max : 0.307999998331 Min : 0.00000000000

SNAPAccuracy

../DCU/j12may.014.dat.3j

s221t3d.dat.digi3J

Average: 17.154897809513 Stdev: 4.780385971069 Max: 29.612930297852 Min: 2.354576349258

SNAPAccuracy

../DCU/j12may.014.dat.1g

s221t3d.dat.digi1G

Average: 0.171468081445 Stdev: 0.106024928391 Max: 0.377000004053 Min: 0.0000000000000

SNAPAccuracy

../DCU/j12may.014.dat.2g

s221t3d.dat.digi2G

Average: 0.126492424183 Stdev: 0.088983274996 Max: 0.307999998331 Min: 0.0000000000000

SNAPAccuracy

../DCU/j12may.014.dat.3g

s221t3d.dat.digi3G

Average: 17.148812371783 Stdev: 4.855510234833 Max: 28.900529861450 Min: 1.785896182060

SNAPAccuracy

../DCU/g12may.014.dat.1j

s221t3d.dat.digi1J

Average: 0.174419878714 Stdev: 0.105829529464 Max: 0.377000004053 Min: 0.000899999985

SNAPAccuracy

../DCU/g12may.014.dat.2j

s221t3d.dat.digi2J

Average: 0.124476003971 Stdev: 0.087537355721 Max: 0.307999998331 Min: 0.0000000000000

SNAPAccuracy

../DCU/g12may.014.dat.3j

s221t3d.dat.digi3J

Average: 17.154897809513 Stdev: 4.780385971069 Max: 29.612930297852 Min: 2.354576349258 **SNAPAccuracy**

../DCU/g12may.014.dat.1g

s221t3d.dat.digi1G

Average: 0.171468081445 Stdev: 0.106024928391 Max: 0.377000004053 Min: 0.000000000000

SNAPAccuracy

../DCU/g12may.014.dat.2g

s221t3d.dat.digi2G

Average: 0.126492424183 Stdev: 0.088983274996 Max: 0.307999998331

Min : 0.00000000000

SNAPAccuracy

../DCU/g12may.014.dat.3g

s221t3d.dat.digi3G

Average: 8.101630795965 Stdev: 2.003329992294 Max: 10.176090240479

Min : 0.846509277821

7.1.15 Stats.015

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.001948 Maximum: 0.012373 2nd Max: 0.006624 Minimum: 0.00089

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00204736 Maximum: 0.011978 2nd Max: 0.00702 Minimum: 0.00089

RateErr: 0

/sg16/usr1/nets/DISNET/di

snet7.stats
PDUs: 1014
Count: 941
Average: 1972.93
Maximum: 3378.38
2nd Max: 3367
Minimum: -9259.26

Frames: 228746 Average: 0.00022504 Maximum: 0.010692 2nd Max: 0.010199 Minimum: 1.8e-05 PDUs from Net1: 1011 PDUs from Net2: 1014

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 1011 Average: 0.0459376 Variance: 9.06965e-05 Maximum: 0.07514 2nd Max: 0.074941 Minimum: 0.021355

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 1014 Average: 0.0451331 Variance: 0.000103754 Maximum: 0.072271 2nd Max: 0.071876 Minimum: 0.011073

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.049066 Maximum: 0.079525 Minimum: 0.014781 Variance: 0.000098 Std Dev: 0.009875

SNAPTimes.pl

Sel-J Tss avg.:

0.00069995816730114026

Sel-J Tns avg.:

0.00034778685236175311

Sel-J Tnr avg.:

0.0016071314742464936

Sel-J Trs avg.:

0.00055399203218591117

Sel-J NIU avg.:

0.0019838764938719263

Sel-J Tgs avg.: 0 Sel-J Tgr avg.:

0.00029541035691221465

DCUAccuracy g12may.015.dat.j

j12may.015.dat.ownship Average: 1.023112814092 Stdev: 1.003585457802 Max: 4.851139545441 Min: 0.032202482224

DCUAccuracy j12may.015.dat.g g12may.015.dat.ownship Average: 1.140013659193 Stdev: 0.942986786366

Max : 4.898039340973

Min : 0.137615397573

SNAPAccuracy

../DCU/g12may.015.dat.1i

s231t3d.dat.digi1J

Average: 0.156349594776 Stdev: 0.100948348641 Max : 0.351000010967 Min : 0.000000000000

SNAPAccuracy

../DCU/g12may.015.dat.2i

s231t3d.dat.digi2J

Average: 16.596943900411 Stdev: 4.520821094513 Max : 29.251811981201 Min : 1.858757615089

SNAPAccuracy

../DCU/g12may.015.dat.3j

s231t3d.dat.digi3J

Average: 17.086459787751 Stdev: 4.614149093628 Max: 29.489196777344 Min : 2.447040796280

SNAPAccuracy

../DCU/g12may.015.dat.1g

s231t3d.dat.digi1G

Average: 0.157991767962 Stdev: 0.103271514177 Max : 0.388999998569 Min : 0.00000000000

SNAPAccuracy

../DCU/g12may.015.dat.2g

s231t3d.dat.digi2G

Average: 5.057002264333 Stdev: 1.996603846550 Max : 10.206469535828 Min: 0.641053020954

SNAPAccuracy

../DCU/g12may.015.dat.3g

s231t3d.dat.digi3G

Average: 7.925628392572 Stdev: 2.047596693039 Max : 10.095858573914 Min : 1.501780629158

SNAPAccuracy

../DCU/j12may.015.dat.1j

s231t3d.dat.digi1J

Average: 0.234612028709 Stdev: 0.108569107950 Max : 0.449000000954 Min : 0.01999999553

SNAPAccuracy

../DCU/j12may.015.dat.2j

s231t3d.dat.digi2J

Average: 4.804334451875 Stdev: 1.779375910759 Max: 10.244644165039 Min : 0.558952569962

SNAPAccuracy

../DCU/j12may.015.dat.3j s231t3d.dat.digi3J

Average: 7.501943643074

Stdev: 2.316275358200 Max : 10.105792999268 Min : 1.274603128433

SNAPAccuracy

../DCU/i12may.015.dat.1q

s231t3d.dat.digi1G

Average: 0.237942505590 Stdev: 0.108088545501 Max : 0.449000000954 Min : 0.01999999553

SNAPAccuracy

../DCU/i12may.015.dat.2q

s231t3d.dat.digi2G

Average:

16.388348364685

Stdev: 4.496959209442 Max : 29.389774322510

Min : 2.395653009415

SNAPAccuracy

../DCU/j12may.015.dat.3g

s231t3d.dat.digi3G

Average:

16.616729881494

Stdev: 4.625948905945 Max : 29.348852157593

Min : 2.268107652664

7.1.16 Stats.016

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.00230162 Maximum: 0.013065 2nd Max: 0.006526 Minimum: 7.6e-05

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00230989 Maximum: 0.007217

2nd Max: 0.001681 Minimum: 0.000988

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 1509 Count: 1253 Average: 2052.96 Maximum: 3826.53 2nd Max: 3378.38 Minimum: -352.237

Frames: 301704 Average: 0.000230814 Maximum: 0.010198 2nd Max: 0.010198 Minimum: 1.8e-05

PDUs from Net1: 1506 PDUs from Net2: 1509

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 1506 Average: 0.0451773 Variance: 9.93586e-05 Maximum: 0.076028 2nd Max: 0.07237 Minimum: 0.014928

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 1509 Average: 0.0460345 Variance: 9.97877e-05 Maximum: 0.08631 2nd Max: 0.080181 Minimum: 0.015423

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.049990 Maximum: 0.088058 Minimum: 0.015808 Variance: 0.000104 Std Dev: 0.010190

SNAPTimes.pl

Sel-J Tss avg.:

0.00069993027916435057

Sel-J Tns avg.:

0.00034507768940244545

Sel-J Tnr avg.:

0.0018760677290462567

Sel-J Trs avg.:

0.00040233266886334821

Sel-J NIU avg.:

0.0022522649404604872

Sel-J Tgs avg.: 0 Sel-J Tgr avg.:

0.00029541035691221465

DCUAccuracy g12may.016.dat.j i12may.016.dat.ownship Average: 0.995142436203

Stdev: 0.975558102131 Max: 4.853892326355 Min : 0.032202482224

DCUAccuracy j12may.016.dat.g

g12may.016.dat.ownship Average: 1.169800976752 Stdev: 0.942199647427 Max : 4.898167133331 Min : 0.182098880410

SNAPAccuracy

../DCU/g12may.016.dat.1j

s241t3d.dat.digi1J

Average: 16.415903377292 Stdev: 4.635340690613 Max : 29.505414962769 Min : 1.692761778831

SNAPAccuracy

../DCU/g12may.016.dat.2j

s241t3d.dat.digi2J

Average: 16.513835309971 Stdev: 4.523612022400 Max : 28.799961090088 Min : 2.040712833405

SNAPAccuracy

../DCU/g12may.016.dat.3j

s241t3d.dat.digi3J

Average: 17.224806613285 Stdev: 4.705103397369 Max : 29.347822189331 Min : 2.689293622971

SNAPAccuracy

../DCU/g12may.016.dat.1g

s241t3d.dat.digi1G

Average: 5.362235901941 Stdev: 2.282408952713 Max : 10.257950782776 Min : 0.500312924385

SNAPAccuracy

../DCU/g12may.016.dat.2g

s241t3d.dat.digi2G

Average: 5.553138326831 Stdev: 2.285123586655 Max : 10.110599517822 Min : 1.218243837357

SNAPAccuracy

../DCU/g12may.016.dat.3g

s241t3d.dat.digi3G

Average: 8.180317907986 Stdev: 1.746997833252 Max: 10.053025245667 Min : 2.137738227844

SNAPAccuracy

../DCU/j12may.016.dat.1j

s241t3d.dat.digi1J

Average: 5.405615906001 Stdev: 2.295233726501 Max : 10.304921150208 Min : 0.561636209488

SNAPAccuracy

../DCU/j12may.016.dat.2j

s241t3d.dat.digi2J

Average: 5.520457540959 Stdev: 2.291624784470 Max : 10.137728691101 Min : 1.057794809341

SNAPAccuracy

../DCU/j12may.016.dat.3j

s241t3d.dat.digi3J

Average: 8.093822317344 Stdev: 1.827189564705 Max : 10.059059143066 Min: 1.980497360229

SNAPAccuracy

../DCU/j12may.016.dat.1g s241t3d.dat.digi1G

Average:

16.534156874606

Stdev: 4.703844070435 Max : 28.474500656128 Min: 1.721991896629

SNAPAccuracy

../DCU/j12may.016.dat.2g

s241t3d.dat.digi2G

Average:

16.898499553985

Stdev: 4.891589164734 Max : 29.561250686646 Min : 2.027615547180

SNAPAccuracy

../DCU/j12may.016.dat.3g s241t3d.dat.digi3G

Average:

17.283019527250

Stdev: 4.677859783173 Max : 29.238658905029 Min : 2.849569320679

7.2 14 May 97 Data

7.2.1 Stats.001

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.0026594 Maximum: 0.012753 2nd Max: 0.007218 Minimum: 0.001385

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00247347 Maximum: 0.012457 2nd Max: 0.012457 Minimum: 0.001383

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 503

Average: 0.00182496 Maximum: 0.010183 2nd Max: 0.004152 Minimum: 0.000395

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 503

Average: 0.00178692 Maximum: 0.00959 2nd Max: 0.005054 Minimum: 0.000396

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 25 Count: 24 Average: 1799.96 Maximum: 3355.7 2nd Max: 2525.25 Minimum: 1264.22

Frames: 363512 Average: 0.0002309 Maximum: 0.010298 2nd Max: 0.010298 Minimum: 8.8e-05

PDUs from Net1: 24 PDUs from Net2: 25

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 24
Average: 0.0433553
Variance: 0.000109576
Maximum: 0.063769
2nd Max: 0.045578
Minimum: 0.025606
-- End Stats from
CircularBuffer --

PDU Buffer 2
-- Stats from
CircularBuffer -NumPass: 25

Average: 0.0468825
Variance: 7.17365e-05
Maximum: 0.06278
2nd Max: 0.062187
Minimum: 0.023925
-- End Stats from
CircularBuffer --

SNAPPdus.pl

Average: 1.072219 Maximum: 4.912565 Minimum: 0.000215 Variance: 2.535505 Std Dev: 1.592327

SNAPTimes.pl s212t0.dat | SNAPCodeTimes.pl

Sel-J Tss avg.:

0.00097588247015925709

Sel-J Tns avg.:

0.00080370717124565434

Sel-J Tnr avg.:

0.0015750039844037186

Sel-J Trs avg.:

0.00038402788838477384

Sel-J NIU avg.:

0.0024126015937888522

Sel-J Nius avg.:

0.00080370717124565434

Sel-J Niur avg.:

0.0015750039844037186

Sel-J Tgs avg.:

0.00078088645409932732

Sel-J Tgr avg.:

0.00041849402397378454

DCUAccuracy j14may.001.dat.g

g14may.001.dat.ownship

Average:

12.328419161582

Stdev: 1.870245814323 Max: 13.854973793030

Min : 0.296233028173

DCUAccuracy g14may.001.dat.i

j14may.001.dat.ownship Average: 12.629218091451 Stdev: 2.146621227264 Max: 19.591806411743 Min: 0.097529478371

SNAPAccuracy

../DCU/j14may.001.dat.1j

s212t0.dat.digi1J

Average: 5.920080355579 Stdev: 0.134014546871 Max: 5.970600128174 Min: 2.970000028610

SNAPAccuracy

../DCU/j14may.001.dat.2j

s212t0.dat.digi2J

Average: 6.264526632464 Stdev: 0.300420224667 Max: 6.355830192566 Min: 0.283899992704

SNAPAccuracy

../DCU/j14may.001.dat.3j

s212t0.dat.digi3J

Average: 6.554459025543 Stdev: 0.404022306204 Max: 6.681719779968 Min: 0.550999999046

SNAPAccuracy

../DCU/j14may.001.dat.1g

s212t0.dat.digi1G

Average: 5.675615551056 Stdev: 0.759628713131 Max: 5.965159893036 Min: 0.180099993944

SNAPAccuracy

../DCU/j14may.001.dat.2g

s212t0.dat.digi2G

Average: 6.029563612812 Stdev: 0.865159690380 Max: 6.350389957428 Min: 0.054999999702

SNAPAccuracy

../DCU/j14may.001.dat.3g

s212t0.dat.digi3G

Average: 6.292752171617 Stdev: 0.979714214802 Max: 6.676280021667 Min: 0.339000016451

SNAPAccuracy

../DCU/g14may.001.dat.1j

s212t0.dat.digi1J

Average: 5.772974510038

Stdev: 0.627510666847 Max : 6.023900032043 Min : 0.208000004292

SNAPAccuracy

../DCU/q14may.001.dat.2i

s212t0.dat.digi2J

Average: 6.142813136162 Stdev: 0.674125373363 Max : 6.411250114441 Min : 0.123000003397

SNAPAccuracy

../DCU/g14may.001.dat.3i

s212t0.dat.digi3J

Average: 6.422751077980 Stdev: 0.738949060440 Max : 6.737140178680 Min : 0.420000016689

SNAPAccuracy

../DCU/g14may.001.dat.1g

s212t0.dat.digi1G

Average: 6.004299033336 Stdev: 0.014632512815 Max : 6.059360027313 Min : 5.818999767303

SNAPAccuracy

../DCU/g14may.001.dat.2g

s212t0.dat.digi2G

Average: 6.360403885064 Stdev: 0.020377160981 Max : 6.415299892426 Min: 6.153999805450

SNAPAccuracy

../DCU/g14may.001.dat.3g

s212t0.dat.digi3G

Average: 6.650919734112 Stdev: 0.270799666643 Max : 6.779500007629 Min : 0.63999985695

7.2.2 Stats.002

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.00251981 Maximum: 0.009096 2nd Max: 0.007316 Minimum: 0.001483

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.0025107

Maximum: 0.008898 2nd Max: 0.007416 Minimum: 0.000274

RateErr: 0

/sg16/usr1/nets/GATEWA

Y/gateway1.stats Frames: 503

Average: 0.00300741 Maximum: 0.010876 2nd Max: 0.004252 Minimum: 0.000274

/sg16/usr1/nets/GATEWA

Y/gateway2.stats Frames: 503

Average: 0.00306453 Maximum: 0.014845 2nd Max: 0.010578 Minimum: 0.000297

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs : 483 Count: 476 Average: 1591.96 Maximum: 11111.1 2nd Max: 2531.65 Minimum: -360.62

Frames: 342796 Average: 0.000235613 Maximum: 0.011568 2nd Max: 0.010298 Minimum: 1.9e-05

PDUs from Net1: 480 PDUs from Net2: 483

PDU Buffer 1 -- Stats from

CircularBuffer ---

NumPass: 480 Average: 0.0459103 Variance: 0.000101882 Maximum: 0.075336 2nd Max: 0.072369 Minimum: 0.017698

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 483

Average: 0.0449992 Variance: 9.62426e-05 Maximum: 0.07059 2nd Max: 0.069503

Minimum: 0.015917

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.126267 Maximum: 2.842892 Minimum: 0.000015 Variance: 0.034565 Std Dev: 0.185917

SNAPTimes.pl s222t0.dat

Sel-J Tss avg.:

0.00097826294802371371

Sel-J Tns avg.:

0.0008328764937563885

Sel-J Tnr avg.:

0.0015942828689571526

Sel-J Trs avg.:

0.00062154183277639513

Sel-J NIU avg.:

0.0024592290840037929

Sel-J Nius avg.:

0.0008328764937563885

Sel-J Niur avg.:

0.0015942828689571526

Sel-J Tgs avg.:

0.0013614780879700073

Sel-J Tgr avg.:

0.0010254820714847544

DCUAccuracy j14may.002.dat.g

g14may.002.dat.ownship Average: 12.285549728430 Stdev: 1.860463857651 Max : 13.664728164673 Min : 0.301439881325

DCUAccuracy g14may.002.dat.i

i14mav.002.dat.ownship Average: 12.682994754845 Stdev: 1.852337598801 Max: 13.996452331543 Min : 0.221819743514

SNAPAccuracy

../DCU/j14may.002.dat.1i

s222t0.dat.digi1J

Average: 5.927717135946 Stdev: 0.019645316526 Max : 5.979000091553 Min : 5.829600334167

SNAPAccuracy

../DCU/j14may.002.dat.2j

s222t0.dat.digi2J

Average: 6.252666316042 Stdev: 0.032927978784 Max : 6.335000038147 Min : 6.185699939728

SNAPAccuracy

../DCU/j14may.002.dat.3j

s222t0.dat.digi3J

Average: 15.687755861992 Stdev: 2.693001747131 Max: 19.119375228882 Min: 6.970717430115

SNAPAccuracy

../DCU/j14may.002.dat.1g

s222t0.dat.digi1G

Average: 5.581418528976 Stdev: 0.567037701607 Max: 5.946700096130 Min: 0.072900004685

SNAPAccuracy

../DCU/j14may.002.dat.2g

s222t0.dat.digi2G

Average: 5.932296012617 Stdev: 0.755650818348 Max: 6.315130233765 Min: 0.177400007844

SNAPAccuracy

../DCU/j14may.002.dat.3g

s222t0.dat.digi3G

Average: 27.208755914870 Stdev: 3.894809722900 Max: 38.136386871338 Min: 16.973123550415

SNAPAccuracy

../DCU/g14may.002.dat.1j

s222t0.dat.digi1J

Average: 5.632039566245 Stdev: 0.825479626656 Max: 6.037600040436 Min: 0.004399999976

SNAPAccuracy

../DCU/g14may.002.dat.2j

s222t0.dat.digi2J

Average: 5.938927247002 Stdev: 0.835243463516 Max: 6.393199920654 Min: 0.254000008106

SNAPAccuracy

../DCU/g14may.002.dat.3j

s222t0.dat.digi3J

Average: 27.520048438526 Stdev: 3.833624601364 Max: 37.460674285889 Min: 13.685413360596 SNAPAccuracy

../DCU/g14may.002.dat.1g

s222t0.dat.digi1G

Average: 6.007670834271 Stdev: 0.015011884272 Max: 6.059299945831 Min: 5.948999881744

SNAPAccuracy

../DCU/g14may.002.dat.2g

s222t0.dat.digi2G

Average: 6.364836853994 Stdev: 0.021145427600 Max: 6.453999996185 Min: 6.266799926758

SNAPAccuracy

../DCU/g14may.002.dat.3g

s222t0.dat.digi3G

Average:

15.861555802750

Stdev: 2.732076883316 Max: 19.275102615356 Min: 7.004560470581

7.2.3 Stats.003

/usr1/figd/DIS2.2/dis4.stats

Frames: 502

Average: 0.00288747 Maximum: 0.012075 2nd Max: 0.01038 Minimum: 0.001483

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00271328 Maximum: 0.012767 2nd Max: 0.007514 Minimum: 0.001285

RateErr: 0

/sg16/usr1/nets/GATEWA

Y/gateway1.stats Frames : 503

Average: 0.00422502 Maximum: 0.013461 2nd Max: 0.008898 Minimum: 0.000396

/sg16/usr1/nets/GATEWA Y/gateway2.stats

Frames: 503

Average: 0.00406946 Maximum: 0.013262 2nd Max: 0.011073 Minimum: 0.000395

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 941 Count: 746 Average: 1684.72 Maximum: 3378.38 2nd Max: 3367 Minimum: -226.937

Frames: 257131 Average: 0.000234355 Maximum: 0.013742 2nd Max: 0.012358 Minimum: 9.5e-05

PDUs from Net1: 936 PDUs from Net2: 941

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 936 Average: 0.046193 Variance: 9.05641e-05 Maximum: 0.075252 2nd Max: 0.074248 Minimum: 0.007514

- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 941 Average: 0.0455569 Variance: 0.000107069 Maximum: 0.078895 2nd Max: 0.072765 Minimum: 0.010282

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.098712 Maximum: 1.795423 Minimum: 0.000020 Variance: 0.011864 Std Dev: 0.108920

SNAPTimes.pl s232t0.dat

Sel-J Tss avg.:

0.00098077490061602231

Sel-J Tns avg.:

0.00091617529899548861

Sel-J Tnr avg.:

0.0017233346614998718

Sel-J Trs avg.:

Sel-J IIS avy..

0.0004095338646506156

Sel-J NIU avg.:

0.0026755936258167318 Sel-J Nius avg.:

0.00091617529899548861

Sel-J Niur avg.:

0.0017233346614998718

Sel-J Tgs avg.:

0.0020770079684288398

Sel-J Tgr avg.:

0.0015029083659760635

DCUAccuracy j14may.003.dat.g

g14may.003.dat.ownship Average: 12.478254544590 Stdev: 1.107309103012 Max : 16.607318878174 Min : 2.794416666031

DCUAccuracy g14may.003.dat.j

j14may.003.dat.ownship Average: 12.824254350778 Stdev: 1.212903738022 Max : 25.930599212646 Min : 2.686456680298

SNAPAccuracy

../DCU/j14may.003.dat.1j

s232t0.dat.digi1J

Average: 5.926715217606 Stdev: 0.026339478791 Max : 6.181000232697 Min : 5.649000167847

SNAPAccuracy

../DCU/j14may.003.dat.2j

s232t0.dat.digi2J

Average: 14.644568575700 Stdev: 2.685286998749 Max : 18.188207626343 Min : 9.568576812744

SNAPAccuracy

../DCU/j14may.003.dat.3j

s232t0.dat.digi3J

Average: 15.881260534168 Stdev: 2.720808029175 Max : 19.288194656372 Min: 8.715104103088

SNAPAccuracy

../DCU/j14may.003.dat.1g

s232t0.dat.digi1G

Average: 5.744819394624 Stdev: 0.506956994534 Max : 5.968019962311 Min : 0.208999991417

SNAPAccuracy

../DCU/j14may.003.dat.2g

s232t0.dat.digi2G

Average: 26.011681972604 Stdev: 4.084377288818 Max : 37.955955505371

Min : 17.291906356812

SNAPAccuracy

../DCU/j14may.003.dat.3g

s232t0.dat.digi3G

Average:

27.426119357529

Stdev: 3.841435909271 Max : 37.576416015625

Min: 18.615245819092

SNAPAccuracy

../DCU/g14may.003.dat.1i

s232t0.dat.digi1J

Average: 5.763330231332 Stdev: 0.574661552906 Max : 11.925000190735 Min : 0.486999988556

SNAPAccuracy

../DCU/q14may.003.dat.2j

s232t0.dat.digi2J

Average:

26.135755353235

Stdev: 3.923011541367 Max: 38.066253662109

Min : 16.716573715210

SNAPAccuracy

../DCU/g14may.003.dat.3j

s232t0.dat.digi3J

Average:

27.539382585282

Stdev: 3.716408729553 Max: 38.048088073730

Min: 17.899539947510

SNAPAccuracy

../DCU/g14may.003.dat.1g

s232t0.dat.digi1G

Average: 6.015390453684 Stdev: 0.281554758549 Max : 12.029999732971 Min: 4.258999824524

SNAPAccuracy

../DCU/g14may.003.dat.2g

s232t0.dat.digi2G

Average:

14.785246388533

Stdev: 2.749984502792 Max : 20.667978286743 Min : 9.630243301392

SNAPAccuracy

../DCU/g14may.003.dat.3g

s232t0.dat.digi3G

Average:

16.058913773934

Stdev: 2.784799098969 Max : 22.332489013672

Min: 8.707365036011

7.2.4 Stats.004

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.00301757 Maximum: 0.014237 2nd Max: 0.007711 Minimum: 0.001286

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00295751 Maximum: 0.013545 2nd Max: 0.007217 Minimum: 0.001385

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 503

Average: 0.0054341 Maximum: 0.017104 2nd Max: 0.016906 Minimum: 0.000297

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 503

Average: 0.00535913 Maximum: 0.02442 2nd Max: 0.019477 Minimum: 0.000295

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 1431 Count: 945 Average: 1638.4 Maximum: 3378.38 2nd Max: 3367 Minimum: -1033.32

Frames: 334329 Average: 0.000283116 Maximum: 0.014928 2nd Max: 0.014831 Minimum: 8.9e-05

PDUs from Net1: 1397 PDUs from Net2: 1433

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 1397 Average: 0.0460167 Variance: 9.72298e-05 Maximum: 0.080675 2nd Max: 0.072469 Minimum: 0.015718

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 1433 Average: 0.0455931 Variance: 0.00010872 Maximum: 0.081664 2nd Max: 0.073655 Minimum: 0.012061

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.078743 Maximum: 2.847630 Minimum: 0.000031 Variance: 0.020256 Std Dev: 0.142322

SNAPTimes.pl s242t0.dat

Sel-J Tss avg.:

0.00098493426306654644

Sel-J Tns avg.:

0.00093452589644005052

Sel-J Tnr avg.:

0.0018784422309145303

Sel-J Trs avg.:

0.00040948804762665241

Sel-J NIU avg.:

0.0028454541831137705

Sel-J Nius avg.:

0.00093452589644005052

Sel-J Niur avg.:

0.0018784422309145303

Sel-J Tgs avg.:

0.0027651095613735206

Sel-J Tgr avg.:

0.0016306573707984659

DCUAccuracy j14may.004.dat.g

g14may.004.dat.ownship Average: 12.969963106338 Stdev : 2.887572050095 Max : 17.263900756836 Min : 0.210116639733

DCUAccuracy g14may.004.dat.j

j14may.004.dat.ownship Average: 12.802238402061 Stdev: 2.828894853592 Max: 26.112667083740 Min: 0.140856981277 SNAPAccuracy

../DCU/j14may.004.dat.1j

s242t0.dat.digi1J

Average:

13.472489445440

Stdev: 2.732716798782 Max: 18.842699050903

Min: 8.206096649170

SNAPAccuracy

../DCU/j14may.004.dat.2j

s242t0.dat.digi2J

Average:

14.888892460254

Stdev: 2.720266819000 Max: 19.654628753662

Min: 9.644301414490

SNAPAccuracy

../DCU/j14may.004.dat.3j

s242t0.dat.digi3J

Average:

15.933480251220

Stdev: 2.840010881424 Max: 20.387563705444 Min: 5.165315628052

SNAPAccuracy

../DCU/j14may.004.dat.1g

s242t0.dat.digi1G

Average:

24.928984570163

Stdev: 4.471079826355 Max: 45.865364074707 Min: 11.773078918457

SNAPAccuracy

../DCU/j14may.004.dat.2g

s242t0.dat.digi2G

Average:

26.778699971993

Stdev: 4.655029773712 Max: 41.937858581543

Min : 11.687380790710

SNAPAccuracy

../DCU/j14may.004.dat.3g s242t0.dat.digi3G

Average:

27.569022143688

Stdev: 4.308722972870 Max: 41.266437530518

Min: 11.724865913391

SNAPAccuracy

../DCU/g14may.004.dat.1j

s242t0.dat.digi1J

Average: 25.211133334023 Stdev : 4.451555728912 Max : 41.292301177979

Min : 9.575398445129

SNAPAccuracy

../DCU/g14may.004.dat.2j

s242t0.dat.digi2J

Average: 26.896461053504 Stdev: 4.510819435120 Max: 41.198905944824 Min: 11.689505577087

SNAPAccuracy

../DCU/g14may.004.dat.3j

s242t0.dat.digi3J

Average: 28.204009172105 Stdev: 4.476038455963 Max: 43.697689056396 Min: 11.732244491577

SNAPAccuracy

../DCU/g14may.004.dat.1g

s242t0.dat.digi1G

Average: 13.864746818120 Stdev: 3.704813480377 Max: 33.694450378418 Min: 4.872984886169

SNAPAccuracy

../DCU/g14may.004.dat.2g

s242t0.dat.digi2G

Average: 15.259495345640 Stdev: 3.673387289047 Max: 34.921047210693 Min: 4.941376686096

SNAPAccuracy

../DCU/g14may.004.dat.3g

s242t0.dat.digi3G

Average: 16.380013562784 Stdev: 3.732285261154 Max: 36.365863800049 Min: 5.252491474152

7.2.5 Stats.005

/usr1/figd/DIS2.2/dis_lite3.stats

Frames: 503

Average: 0.00242566 Maximum: 0.007217 2nd Max: 0.006723 Minimum: 0.001483

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 503

Average: 0.00258979 Maximum: 0.007415 2nd Max: 0.006327 Minimum: 0.001484

RateErr: 0

e2.stats

/sg16/usr1/nets/GATEWAY/gateway_lit

Frames: 503 Average: 0.00274075 Maximum: 0.011567 2nd Max: 0.011271 Minimum: 0.000396

/sg16/usr1/nets/GATEWAY/gateway_lit

e1.stats
Frames: 503

Average: 0.00289382 Maximum: 0.01305 2nd Max: 0.00435 Minimum: 0.000395

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 192 Count : 190 Average: 1556.74 Maximum: 2538.07 2nd Max: 2531.65 Minimum: -108.589

Frames: 321559 Average: 0.000228815 Maximum: 0.010298 2nd Max: 0.010296 Minimum: 9.5e-05

PDUs from Net1: 188 PDUs from Net2: 192

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 188 Average: 0.0453129 Variance: 9.87859e-05 Maximum: 0.068612 2nd Max: 0.067032 Minimum: 0.017895

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 192 Average: 0.0448607 Variance: 8.63709e-05 Maximum: 0.070788 2nd Max: 0.063472 Minimum: 0.022048

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.074596 Maximum: 0.321659 Minimum: 0.000017 Variance: 0.003711 Std Dev: 0.060915

SNAPTimes.pl s212t0l.dat

Sel-J Tss avg.:

0.00097067529856008426

Sel-J Tns avg.:

0.0011339780875825808

Sel-J Tnr avg.:

0.0011936693228338287

Sel-J Trs avg.:

0.00040630876513121953

Sel-J NIU avg.:

0.0023629262947047914

Sel-J Nius avg.:

0.0011339780875825808

Sel-J Niur avg.:

0.0011936693228338287

Sel-J Tgs avg.:

0.0013468844625464384

Sel-J Tgr avg.:

0.00090765737063683706

DCUAccuracy j14may.005.dat.g

g14may.005.dat.ownship

Average:

34.549562282951

Stdev: 26.283302307129
Max: 77.710128784180
Min: 0.208060085773

DCUAccuracyLite i14may.005.dat.g

g14may.005.dat.ownship

50.0

Average:

12.626524166506

Stdev: 1.615946173668 Max: 29.515640258789 Min: 0.208060085773

DCUAccuracy

g14may.005.dat.j

j14may.005.dat.ownship

Average:

45.362631180026

Stdev: 32.246429443359 Max: 90.280052185059 Min: 9.316006660461

DCUAccuracyLite g14may.005.dat.j

j14may.005.dat.ownship 50.0 Average: 13.128216770496 Stdev: 0.864745736122 Max: 25.863208770752

Min : 9.316006660461

SNAPAccuracy

../DCU/j14may.005.dat.1j

s212t0l.dat.digi1J

Average: 5.941881131838 Stdev: 0.273188918829 Max: 12.000000000000 Min: 5.881000041962

SNAPAccuracy

../DCU/j14may.005.dat.2j

s212t0l.dat.digi2J

Average: 6.305879300269 Stdev: 0.258498579264 Max: 12.000000000000 Min: 6.0000000000000

SNAPAccuracy

../DCU/j14may.005.dat.3j

s212t0l.dat.digi3J

Average: 6.624712777090 Stdev : 0.347093135118 Max : 12.000000000000 Min : 6.000000000000

SNAPAccuracy

../DCU/j14may.005.dat.1g

s212t0l.dat.digi1G

Average: 32.874269624753 Stdev: 2.996931314468 Max: 36.017700195312 Min: 29.625000000000

SNAPAccuracy

../DCU/j14may.005.dat.2g

s212t0l.dat.digi2G

Average: 32.874097684818 Stdev : 3.021029710770 Max : 42.000000000000 Min : 29.625000000000

SNAPAccuracy

../DCU/j14may.005.dat.3g

s212t0l.dat.digi3G

Average: 35.631880166323 Stdev : 0.224872022867 Max : 36.017700195312 Min : 35.218997955322

SNAPAccuracy

../DCU/g14may.005.dat.1j

s212t0l.dat.digi1J

Average: 26.906785092373 Stdev: 3.071041107178 Max : 36.000000000000 Min : 21.747999191284

SNAPAccuracy

../DCU/g14may.005.dat.2j

s212t0l.dat.digi2J

Average: 32.775999609758 Stdev: 3.046915292740 Max: 42.000000000000 Min: 28.022998809814

SNAPAccuracy

../DCU/g14may.005.dat.3j

s212t0l.dat.digi3J

Average: 29.848659894529 Stdev: 0.495838195086 Max: 36.000000000000 Min: 27.739999771118

SNAPAccuracy

../DCU/g14may.005.dat.1g

s212t0l.dat.digi1G

Average: 6.025183473315 Stdev: 0.398953616619 Max: 12.008999824524 Min: 4.013000011444

SNAPAccuracy

../DCU/g14may.005.dat.2g

s212t0l.dat.digi2G

Average: 6.466907750673 Stdev: 0.469897538424 Max: 12.423999786377 Min: 4.458000183105

SNAPAccuracy

../DCU/g14may.005.dat.3g

s212t0l.dat.digi3G

Average: 6.826965179482 Stdev: 0.518526554108 Max: 12.809000015259 Min: 4.812999725342

7.2.6 Stats.006

/usr1/figd/DIS2.2/dis_lite3.stats

Frames: 503 Average: 0.0028247 Maximum: 0.012471 2nd Max: 0.006525 Minimum: 0.001582

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 502

Average: 0.00297986

Maximum: 0.013658 2nd Max: 0.005834

2nd Max: 0.005834 Minimum: 0.001284

RateErr: 0

/sg16/usr1/nets/GATEWA

Y/gateway_lite2.stats

Frames: 503

Average: 0.00415631 Maximum: 0.011073 2nd Max: 0.009491 Minimum: 0.000197

/sg16/usr1/nets/GATEWA

Y/gateway_lite1.stats

Frames: 503

Average: 0.00431141 Maximum: 0.013856 2nd Max: 0.011568 Minimum: 0.000395

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs: 630 Count: 592 Average: 1588.19 Maximum: 3367 2nd Max: 2531.65 Minimum: -229.463

Frames: 231824 Average: 0.000236576 Maximum: 0.010791 2nd Max: 0.010297 Minimum: 9.5e-05

PDUs from Net1: 634 PDUs from Net2: 630

PDU Buffer 1
-- Stats from
CircularBuffer -NumPass: 634
Average: 0.0449475

Variance: 9.14239e-05 Maximum: 0.073161 2nd Max: 0.066142 Minimum: 0.020959

-- End Stats from CircularBuffer --

PDU Buffer 2

- Stats from CircularBuffer --

NumPass: 630 Average: 0.0456821 Variance: 0.000102492 Maximum: 0.075139

2nd Max: 0.065845

Minimum: 0.008404

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.081300 Maximum: 1.927895 Minimum: 0.000016 Variance: 0.013586 Std Dev: 0.116561

SNAPTimes.pl s222t0l.dat

Sel-J Tss avg.:

0.00097980079683104154

Sel-J Tns avg.:

0.0013301494023523783

Sel-J Tnr avg.:

0.0014200816737985112

Sel-J Trs avg.:

0.00040811354577804791

Sel-J NIU avg.:

0.0027898207171894313

Sel-J Nius avg.:

0.0013301494023523783

Sel-J Niur avg.:

0.0014200816737985112

Sel-J Tgs avg.:

0.0021481055775794118

Sel-J Tgr avg.:

0.0015482370521299508

DCUAccuracy j14may.006.dat.g

g14may.006.dat.ownship Average: 45.306779963285 Stdev: 32.435134887695 Max: 77.971099853516 Min: 2.397227048874

DCUAccuracyLite j14may.006.dat.g

g14may.006.dat.ownship 50.0 Average: 12.626868612912 Stdev : 1.322286248207 Max : 13.600284576416 Min : 2.397227048874

DCUAccuracy g14may.006.dat.j

j14may.006.dat.ownship Average: 45.087190797454 Stdev: 32.281852722168 Max: 77.943153381348 Min: 2.631775379181

DCUAccuracyLite g14may.006.dat.j

j14may.006.dat.ownship 50.0 Average: 12.955726976356 Stdev : 1.584759354591 Max : 26.054090499878 Min : 2.631775379181 **SNAPAccuracy**

../DCU/j14may.006.dat.1j

s222t0l.dat.digi1J

Average: 5.945623010217 Stdev: 0.272527873516 Max : 12.000000000000 Min : 5.881000041962

SNAPAccuracy

../DCU/j14may.006.dat.2j

s222t0l.dat.digi2J

Average: 6.346788549327 Stdev: 0.257420718670 Max : 12.000000000000 Min : 6.000000000000

SNAPAccuracy

../DCU/j14may.006.dat.3j

s222t0l.dat.digi3J

Average: 15.605531479511 Stdev: 2.961396694183 Max : 33.360149383545 Min : 10.088557243347

SNAPAccuracy

../DCU/j14may.006.dat.1g

s222t0l.dat.digi1G

Average: 26:304569614828 Stdev: 9.316431999207 Max : 36.017700195312 Min : 5.839000225067

SNAPAccuracy

../DCU/j14may.006.dat.2g

s222t0l.dat.diqi2G

Average: 29.291336339096 Stdev: 8.936755180359 Max: 36.017700195312 Min : 6.224999904633

SNAPAccuracy

../DCU/j14may.006.dat.3g

s222t0l.dat.digi3G

Average: 27.426649592711 Stdev: 7.726526737213 Max: 83.707717895508 Min : 17.069831848145

SNAPAccuracy

../DCU/g14may.006.dat.1j

s222t0l.dat.digi1J

Average: 26.916601250529 Stdev: 7.755683898926 Max : 36.000000000000 Min : 5.907000064850

SNAPAccuracy

../DCU/g14may.006.dat.2j

s222t0l.dat.digi2J

Average:

24.059825925209

Stdev: 7.103129863739 Max : 36.000000000000 Min : 6.292999744415

SNAPAccuracy

../DCU/g14may.006.dat.3j

s222t0l.dat.digi3J

Average:

27.074322420008

Stdev: 8.117499351501 Max : 83.707061767578 Min : 16.701757431030

SNAPAccuracyLite

../DCU/g14may.006.dat.3j s222t0l.dat.digi3J 80.0

Average:

26.142602240179

Stdev: 3.672017812729 Max: 40.438243865967

Min : 16.701757431030

SNAPAccuracy

../DCU/g14may.006.dat.1g

s222t0l.dat.digi1G

Average: 6.013423586466 Stdev: 0.282136470079 Max : 11.999699592590 Min : 4.160500049591

SNAPAccuracy

../DCU/g14may.006.dat.2g

s222t0l.dat.digi2G

Average: 6.439018384791 Stdev: 0.378436088562 Max : 12.415100097656 Min : 4.575900077820

SNAPAccuracy

../DCU/g14may.006.dat.3g s222t0l.dat.digi3G

Average:

16.128337006214

Stdev: 3.054353952408 Max: 35.897380828857 Min: 9.601170539856

7.2.7 Stats.007

/usr1/figd/DIS2.2/dis_lite3.

stats

Frames: 501

Average: 0.00267308 Maximum: 0.0087

2nd Max: 0.006426 Minimum: 0.001384

RateFrr: 0

/usr1/figd/DIS2.2/dis lite4.stats

Frames: 503

Average: 0.00266842 Maximum: 0.008898 2nd Max: 0.006822 Minimum: 0.001384

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway lit

e2.stats

Frames: 503

Average: 0.00540051 Maximum: 0.019195 2nd Max: 0.014138 Minimum: 0.000396

/sg16/usr1/nets/GATEWAY/gateway lit

e1 stats

Frames: 502

Average: 0.00572813 Maximum: 0.018686 2nd Max: 0.01483 Minimum: 0.000395

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 1124 Count : 970 Average: 1610.55 Maximum: 3378.38 2nd Max: 3367 Minimum: -9090.91

Frames: 256034 Average: 0.000249461 Maximum: 0.011582 2nd Max: 0.010792 Minimum: 9.5e-05

PDUs from Net1: 1116 PDUs from Net2: 1124

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 1116 Average: 0.0450095 Variance: 9.70016e-05 Maximum: 0.074447 2nd Max: 0.071481 Minimum: 0.016808

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 1124 Average: 0.0447517 Variance: 0.000105762 Maximum: 0.076028 2nd Max: 0.069122 Minimum: 0.009195

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.078592 Maximum: 4.657882 Minimum: 0.000016 Variance: 0.075222 Std Dev: 0.274266

SNAPTimes.pl Sel-J Tss avg.:

0.00099990039859087663

Sel-J Tns avg.:

0.0011692290837631608

Sel-J Tnr avg.:

0.0013381633464041986

Sel-J Trs avg.:

0.00040158167336135173

Sel-J NIU avg.:

0.0025663107569643437

Sel-J Nius avg.:

0.0011692290837631608

Sel-J Niur avg.:

0.0013381633464041986

Sel-J Tgs avg.:

0.0026724840636632731

Sel-J Tgr avg.:

0.0015212191240161666

DCUAccuracy j14may.007.dat.g

g14may.007.dat.ownship Average: 51.504930383791 Stdev: 38.807773590088 Max: 90.998588562012 Min: 8.721715927124

DCUAccuracyLite j14may.007.dat.g g14may.007.dat.ownship 50.0

Average: 12.892031380039 Stdev: 1.476871490479 Max: 25.777086257935 Min: 8.721715927124

DCUAccuracy g14may.007.dat.j

j14may.007.dat.ownship Average: 15.802213692716 Stdev: 14.749436378479 Max: 90.791191101074 Min: 0.112004466355

DCUAccuracyLite g14may.007.dat.j

j14may.007.dat.ownship 50.0 Average: 12.796182084742 Stdev: 1.353472828865 Max: 26.179033279419 Min : 0.112004466355

SNAPAccuracy

../DCU/j14may.007.dat.1j

s232t0l.dat.digi1J

Average: 5.963255244242 Stdev: 0.563298285007 Max: 11.940999984741 Min: 4.042000293732

SNAPAccuracy

../DCU/j14may.007.dat.2j

s232t0l.dat.digi2J

Average:

14.754271047696

Stdev: 3.075112581253 Max: 33.856117248535

Min: 7.247308254242

SNAPAccuracy

../DCU/j14may.007.dat.3j

s232t0l.dat.digi3J

Average:

16.429721031151

Stdev: 3.253812313080 Max: 35.903656005859

Min: 7.954782962799

SNAPAccuracy

../DCU/j14may.007.dat.1g

s232t0l.dat.digi1G

Average:

32.788861876327

Stdev: 3.054176330566 Max: 41.756000518799 Min: 27.815000534058

SNAPAccuracy

../DCU/j14may.007.dat.2g

s232t0l.dat.digi2G

Average:

25.545935655946

Stdev: 5.798048019409 Max: 83.440536499023 Min: 16.621984481812

SNAPAccuracyLite

../DCU/j14may.007.dat.2g s232t0l.dat.digi2G 80.0

Average:

25.203778122882

Stdev: 3.817247629166 Max: 41.953392028809

Min : 16.621984481812

SNAPAccuracy

../DCU/j14may.007.dat.3g

s232t0l.dat.digi3G

Average: 26.883453314309 Stdev: 5.833889007568 Max: 83.440536499023

Min : 16.707218170166

SNAPAccuracyLite

../DCU/j14may.007.dat.3g s232t0l.dat.digi3G 80.0 Average: 26.545344557644 Stdev : 3.959104299545 Max : 43.125247955322

SNAPAccuracy

../DCU/g14may.007.dat.1j

Min : 16.707218170166

s232t0l.dat.digi1J

Average: 29.819824578554 Stdev: 0.107127703726 Max: 30.026100158691 Min: 29.625000000000

SNAPAccuracy

../DCU/g14may.007.dat.2j

s232t0l.dat.digi2J

Average: 25.400155370975 Stdev: 4.670073032379 Max: 83.440536499023 Min: 16.611009597778

SNAPAccuracyLite

../DCU/g14may.007.dat.2j s232t0l.dat.digi2J 80.0 Average: 25.280730718448 Stdev : 3.861184597015 Max : 36.822616577148 Min : 16.611009597778

SNAPAccuracy

../DCU/g14may.007.dat.3j

s232t0l.dat.digi3J

Average: 26.462215976951 Stdev: 3.643215656281 Max: 46.646896362305 Min: 16.818960189819

SNAPAccuracy

../DCU/g14may.007.dat.1g

s232t0l.dat.digi1G

Average: 6.019690650809 Stdev: 0.269696116447 Max: 12.000000000000 Min: 5.940000057220

SNAPAccuracy

../DCU/g14may.007.dat.2g

s232t0l.dat.digi2G

Average: 15.274071169571 Stdev: 2.847384214401 Max: 33.360149383545 Min: 9.771589279175

SNAPAccuracy

../DCU/g14may.007.dat.3g

s232t0l.dat.digi3G

Average: 16.599389081989 Stdev: 3.094891309738 Max: 33.360149383545 Min: 11.426787376404 Min: 11.426787376404

7.2.8 Stats.008

/usr1/figd/DIS2.2/dis4.stats

Frames: 503 Average: 0.00265134 Maximum: 0.008008 2nd Max: 0.001483 Minimum: 0.001482

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00251548 Maximum: 0.010372 2nd Max: 0.007513 Minimum: 0.001483

RateErr: 0

/usr1/figd/DIS2.2/dis_lite3.stats

Frames: 501

Average: 0.00212161 Maximum: 0.012077 2nd Max: 0.01178 Minimum: 0.001383

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 498 Average: 0.0019777 Maximum: 0.011879 2nd Max: 0.008106 Minimum: 0.001383 RateErr: 0

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/sg16/usr1/nets/GATEWAY/gateway_lit

e2.stats Frames : 498 Average: 0.00177383

Maximum: 0.014632 2nd Max: 0.000396 Minimum: 0.000297

/sg16/usr1/nets/GATEWAY/gateway_lit

e1.stats Frames : 501 Average: 0.00192896

Maximum: 0.01483 2nd Max: 0.000297 Minimum: 0.000297

/sg16/usr1/nets/GATEWA

Y/gateway1.stats Frames: 503

Average: 0.00185923 Maximum: 0.011468 2nd Max: 0.004548 Minimum: 0.000395

/sg16/usr1/nets/GATEWA

Y/gateway2.stats Frames : 503

Average: 0.00197614 Maximum: 0.01048 2nd Max: 0.004746 Minimum: 0.000395

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs : 17 Count : 16

Average: 1568.68 Maximum: 2531.65 2nd Max: 2525.25 Minimum: -108.589

Frames: 285284 Average: 0.000237028 Maximum: 0.010298 2nd Max: 0.010297 Minimum: 8.8e-05

PDUs from Net1: 14 PDUs from Net2: 17

PDU Buffer 1

- Stats from

CircularBuffer -NumPass: 14

Average: 0.0422372 Variance: 7.98171e-05 Maximum: 0.058939 2nd Max: 0.053092 Minimum: 0.028671 -- End Stats from

-- End Stats from CircularBuffer --

PDU Buffer 2
-- Stats from

CircularBuffer -- NumPass: 17

Average: 0.0402337 Variance: 8.76172e-05 Maximum: 0.059221 2nd Max: 0.0523 Minimum: 0.028375

- End Stats from CircularBuffer -

SNAPPdus.pl

Average: 0.004995 Maximum: 0.006632 Minimum: 0.003300 Variance: 0.000002 Std Dev: 0.001361

SNAPTimes.pl s212t0d.dat

Sel-J Tss avg.:

0.00097778884468338557

Sel-J Tns avg.:

0.00080275896401422846

Sel-J Tnr avg.:

0.001606472111951775

Sel-J Trs avg.:

0.00040631673334837074

Sel-J NIU avg.:

0.0024462569722907145

Sel-J Nius avg.:

0.00080275896401422846

Sel-J Niur avg.:

0.001606472111951775

Sel-J Tgs avg.:

0.00080988446201394454

Sel-J Tgr avg.:

0.00042934860524895834

DCUAccuracy j14may.008.dat.g

g14may.008.dat.ownship Average: 1.223102424632 Stdev: 1.014493227005 Max: 5.875279903412 Min: 0.154392361641

DCUAccuracy g14may.008.dat.j

j14may.008.dat.ownship Average: 1.062788870888 Stdev: 1.052683472633 Max: 5.841858863831 Min: 0.058694120497

SNAPAccuracy

../DCU/j14may.008.dat.1j

s212t0d.dat.digi1J

Average: 0.072682092547 Stdev: 0.018953571096 Max: 0.119199998677 Min: 0.020999999717

SNAPAccuracy

../DCU/j14may.008.dat.2j

s212t0d.dat.digi2J

Average: 0.282442298484 Stdev: 0.033609241247 Max: 0.364999979734 Min: 0.207000002265 **SNAPAccuracy**

../DCU/j14may.008.dat.3j s212t0d.dat.digi3J

\$212tUd.dat.digi3J

Average: 0.619234074649 Stdev: 0.032299280167 Max: 0.720000028610 Min: 0.453000009060

SNAPAccuracy

../DCU/j14may.008.dat.1g

s212t0d.dat.digi1G

Average: 0.243162373659 Stdev: 0.106515042484 Max: 0.438999980688 Min: 0.041000001132

SNAPAccuracy

../DCU/j14may.008.dat.2g

s212t0d.dat.digi2G

Average: 0.129160494081 Stdev: 0.089796125889 Max: 0.314999997616 Min: 0.002000000095

SNAPAccuracy

../DCU/j14may.008.dat.3g

s212t0d.dat.digi3G

Average: 0.293203265771 Stdev: 0.198555484414 Max: 0.666319966316 Min: 0.0000000000000

SNAPAccuracy

../DCU/g14may.008.dat.1j

s212t0d.dat.digi1J

Average: 0.168210568058 Stdev: 0.104886919260 Max: 0.370999991894 Min: 0.00079999980

SNAPAccuracy

../DCU/g14may.008.dat.2j

s212t0d.dat.digi2J

Average: 0.190395375110 Stdev: 0.109154924750 Max: 0.425099998713 Min: 0.0000000000000

SNAPAccuracy

../DCU/g14may.008.dat.3j

s212t0d.dat.digi3J

Average: 0.519078511468 Stdev: 0.104147017002 Max: 0.724999964237 Min: 0.310999989510 SNAPAccuracy

../DCU/g14may.008.dat.1g

s212t0d.dat.digi1G

Average: 0.006823219253 Stdev: 0.013266220689 Max: 0.081000000238 Min: 0.0000000000000

SNAPAccuracy

../DCU/g14may.008.dat.2g

s212t0d.dat.digi2G

Average: 0.387702832220 Stdev: 0.020236406475 Max: 0.596000015736 Min: 0.305000007153

SNAPAccuracy

../DCU/g14may.008.dat.3g

s212t0d.dat.digi3G

Average: 0.706416183794 Stdev: 0.020900942385 Max: 0.779999971390 Min: 0.630999982357

7.2.9 Stats.009

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.00278816 Maximum: 0.012274 2nd Max: 0.010281 Minimum: 0.001482

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00261718 Maximum: 0.012472 2nd Max: 0.010084 Minimum: 0.001384

RateErr: 0

/sg16/usr1/nets/GATEWA

Y/gateway1.stats Frames : 502

Average: 0.00299789 Maximum: 0.011878 2nd Max: 0.010876 Minimum: 0.000396

/sg16/usr1/nets/GATEWA

Y/gateway2.stats Frames: 503

Average: 0.00320859 Maximum: 0.013362 2nd Max: 0.011567 Minimum: 0.000296

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 480 Count: 474 Average: 1571.2 Maximum: 3367 2nd Max: 2538.07 Minimum: -110.975

Frames: 227508 Average: 0.000233577 Maximum: 0.011483 2nd Max: 0.010298 Minimum: 9.5e-05

PDUs from Net1: 477 PDUs from Net2: 480

PDU Buffer 1

- Stats from CircularBuffer -

NumPass: 477 Average: 0.0454829 Variance: 0.00010301 Maximum: 0.074149 2nd Max: 0.066537 Minimum: 0.016116

-- End Stats from CircularBuffer --

PDU Buffer 2

- Stats from CircularBuffer -

NumPass: 480 Average: 0.0450628 Variance: 0.000115177 Maximum: 0.073161 2nd Max: 0.070788 Minimum: 0.013743

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.009903 Maximum: 0.014441 Minimum: 0.005365 Variance: 0.000021 Std Dev: 0.004538

SNAPTimes.pl Sel-J Tss avg.:

0.00097879083677908352

Sel-J Tns avg.:

0.00082541832671267912

Sel-J Tnr avg.:

0.0017109302789032222

Sel-J Trs avg.:

0.00047600996017662913

Sel-J NIU avg.:

0.0025697988048668922

Sel-J Nius avg.:

0.00082541832671267912

Sel-J Niur avg.:

0.0017109302789032222

Sel-J Tgs avg.:

0.0013670318723337138

Sel-J Tgr avg.:

0.001023920318779658

DCUAccuracy j14may.009.dat.g

g14may.009.dat.ownship Average: 1.395473076654 Stdev: 1.783884286880 Max : 13.928812980652 Min : 0.105683490634

DCUAccuracy g14may.009.dat.j

j14may.009.dat.ownship Average: 1.232403963706 Stdev: 1.621214389801 Max : 13.377936363220 Min : 0.041109610349

SNAPAccuracy

../DCU/j14may.009.dat.1j

s222t0d.dat.digi1J

Average: 0.072916237424 Stdev: 0.019551280886 Max : 0.140000000596 Min : 0.020999999717

SNAPAccuracy

../DCU/j14may.009.dat.2j

s222t0d.dat.digi2J

Average: 0.283897771412 Stdev: 0.245196685195 Max : 5.715690135956 Min : 0.178000003099

SNAPAccuracy

../DCU/i14may.009.dat.3i

s222t0d.dat.digi3J

Average: 8.061633531476 Stdev: 1.943772912025 Max : 15.205730438232 Min : 1.518107414246

SNAPAccuracy

../DCU/j14may.009.dat.1g

s222t0d.dat.digi1G

Average: 0.451418232173 Stdev: 0.209602400661 Max : 0.826000034809 Min : 0.076099999249

SNAPAccuracy

../DCU/j14may.009.dat.2g s222t0d.dat.digi2G

Average: 0.180680020633 Stdev: 0.625273406506 Max : 5.789400100708

Min : 0.000000000000

SNAPAccuracy

../DCU/j14may.009.dat.3g s222t0d.dat.digi3G

Average:

25.437285474541

Stdev: 5.834767818451 Max : 40.478618621826 Min : 3.150560617447

SNAPAccuracy

../DCU/g14may.009.dat.1j

s222t0d.dat.digi1J

Average: 0.177483120530 Stdev: 0.106492541730 Max : 0.406000018120 Min : 0.001000000047

SNAPAccuracy

../DCU/q14may.009.dat.2i

s222t0d.dat.digi2J

Average: 0.226705842610

Stdev: 0.505501806736 Max : 5.706069946289 Min : 0.001000000047

SNAPAccuracy

../DCU/g14may.009.dat.3j s222t0d.dat.digi3J

Average:

25.409515428737

Stdev: 5.961741924286 Max: 38.335857391357 Min : 3.240329742432

SNAPAccuracy

../DCU/g14may.009.dat.1g s222t0d.dat.digi1G

Average: 0.009720905451 Stdev: 0.013166874647 Max : 0.059300001711 Min : 0.000000000000

SNAPAccuracy

../DCU/g14may.009.dat.2g s222t0d.dat.digi2G

Average: 0.370962093054 Stdev: 0.236789673567 Max : 5.626890182495 Min: 0.296999999940

SNAPAccuracy

../DCU/g14may.009.dat.3g

s222t0d.dat.digi3G

Average: 8.096496224164 Stdev: 1.885690093040

Max: 14.959916114807 Min : 1.900534868240

7.2.10 Stats.010

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.00278932 Maximum: 0.013263 2nd Max: 0.007514 Minimum: 0.001384

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 502

Average: 0.0028512 Maximum: 0.012966 2nd Max: 0.010974 Minimum: 0.00168

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 503

Average: 0.0042768 Maximum: 0.012951 2nd Max: 0.012753 Minimum: 0.000396

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 503

Average: 0.00416497 Maximum: 0.012966 2nd Max: 0.012753 Minimum: 0.000395

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 938 Count: 752 Average: 1636.19 Maximum: 3378.38 2nd Max: 3367 Minimum: -492.55

Frames: 192938 Average: 0.000238672 Maximum: 0.013544 2nd Max: 0.011959 Minimum: 9.5e-05

PDUs from Net1: 935 PDUs from Net2: 938

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 935 Average: 0.0456401 Variance: 0.000104474 Maximum: 0.074461 2nd Max: 0.060605 Minimum: 0.018092

-- End Stats from CircularBuffer --

PDU Buffer 2

- Stats from CircularBuffer --

NumPass: 938 Average: 0.0453649 Variance: 0.000101612 Maximum: 0.074842 2nd Max: 0.067722 Minimum: 0.00781

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.006589 Maximum: 0.006589 Minimum: 0.006589 Variance: 0.000000 Std Dev: 0.000000

SNAPTimes.pl s232t0d.dat

Sel-J Tss avg.:

0.00098139043845560034

Sel-J Tns avg.:

0.00092424502010356104

Sel-J Tnr avg.:

0.0018004661349304192

Sel-J Trs avg.:

0.00047699601575106092

Sel-J NIU avg.:

0.0027570199202298579

Sel-J Nius avg.:

0.00092424502010356104

Sel-J Niur avg.:

0.0018004661349304192

Sel-J Tgs avg.:

0.0021197031870919402

Sel-J Tgr avg.:

0.0014976215141185789

DCUAccuracy j14may.010.dat.g g14may.010.dat.ownship

Average: 1.217644288261 Stdev: 1.063542246819 Max: 6.381868839264 Min: 0.145168870687

DCUAccuracy g14may.010.dat.j

j14may.010.dat.ownship Average: 1.080862755480 Stdev: 1.082036852837 Max: 5.827409744263 Min: 0.014866068959

SNAPAccuracy ../DCU/j14may.010.dat.1j s232t0d.dat.digi1J Average: 0.073802173006 Stdev: 0.056544497609 Max: 1.251100063324 Min: 0.020999999717

SNAPAccuracy ../DCU/j14may.010.dat.2j s232t0d.dat.digi2J

Average: 6.006634987096 Stdev: 2.535047054291 Max: 10.148034095764 Min: 0.941646456718

SNAPAccuracy ../DCU/j14may.010.dat.3j

s232t0d.dat.digi3J

Average: 8.021937725290 Stdev: 1.908692836761 Max: 10.062777519226 Min: 1.890037059784

SNAPAccuracy

../DCU/j14may.010.dat.1g s232t0d.dat.digi1G

Average: 0.451612212565 Stdev: 0.217451587319 Max: 1.467800021172 Min: 0.075470000505

SNAPAccuracy

../DCU/j14may.010.dat.2g s232t0d.dat.digi2G

Average:

24.023627553877

Stdev: 5.583283424377 Max: 36.783878326416 Min: 2.844630002975

SNAPAccuracy

../DCU/j14may.010.dat.3g s232t0d.dat.digi3G

Average:

25.333641645110

Stdev: 5.673122406006 Max: 38.415008544922 Min: 3.327821016312

SNAPAccuracy

../DCU/g14may.010.dat.1j s232t0d.dat.digi1J Average: 0.187297413719

Stdev: 0.105944037437 Max: 0.400999993086 Min: 0.001000000047

SNAPAccuracy ../DCU/g14may.010.dat.2j

s232t0d.dat.digi2J

Average: 23.814197719947 Stdev: 5.951589584351 Max: 38.066734313965 Min: 4.055382251740

SNAPAccuracy

../DCU/g14may.010.dat.3j

s232t0d.dat.digi3J

Average: 25.269649358000 Stdev : 6.026831626892 Max : 38.512172698975 Min : 4.457616329193

SNAPAccuracy

../DCU/g14may.010.dat.1g

s232t0d.dat.digi1G

Average: 0.009300945637 Stdev: 0.014098647051 Max: 0.059399999678 Min: 0.0000000000000

SNAPAccuracy

../DCU/g14may.010.dat.2g

s232t0d.dat.digi2G

Average: 5.994383384284 Stdev: 2.506736040115 Max: 10.128967285156 Min: 1.145676255226

SNAPAccuracy

../DCU/g14may.010.dat.3g

s232t0d.dat.digi3G

Average: 8.151316416815 Stdev: 1.774473428726 Max: 10.053025245667 Min: 2.127623319626

7.2.11 Stats.011

/usr1/figd/DIS2.2/dis4.stats

Frames: 501

Average: 0.00286403 Maximum: 0.010974 2nd Max: 0.006229 Minimum: 0.001384

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 502

Average: 0.00281474 Maximum: 0.008898 2nd Max: 0.006921 Minimum: 0.001285

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 502

Average: 0.00519423 Maximum: 0.015621 2nd Max: 0.014039 Minimum: 0.000297

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 502

Average: 0.00524723 Maximum: 0.021059 2nd Max: 0.01226 Minimum: 0.000297

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 1420 Count: 970 Average: 1706.65 Maximum: 3378.38 2nd Max: 2890.17 Minimum: -1513.62

Frames: 290773 Average: 0.00023725 Maximum: 0.01315 2nd Max: 0.013149 Minimum: 9.5e-05

PDUs from Net1: 1391 PDUs from Net2: 1421

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 1391 Average: 0.0457446 Variance: 0.000103989 Maximum: 0.077624 2nd Max: 0.075633 Minimum: 0.018587

-- End Stats from CircularBuffer --

PDU Buffer 2

- Stats from CircularBuffer -

NumPass: 1421 Average: 0.0456231 Variance: 0.00010267 Maximum: 0.074941 2nd Max: 0.074249 Minimum: 0.017697

- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.012430 Maximum: 0.041464 Minimum: 0.000011 Variance: 0.000090 Std Dev: 0.009506 SNAPTimes.pl s242t0d.dat

Sel-J Tss avg.:

0.00095649800786634437

Sel-J Tns avg.:

0.00091343625504068985

Sel-J Tnr avg.:

0.0017943665337648179

Sel-J Trs avg.:

0.00051584661356985121

Sel-J NIU avg.:

0.0027451892428907595

Sel-J Nius avg.:

0.00091343625504068985

Sel-J Niur avg.:

0.0017943665337648179

Sel-J Tgs avg.:

0.0025776474102897906

Sel-J Tgr avg.:

0.0018886992035271782

DCUAccuracy

j14may.011.dat.g

g14may.011.dat.ownship Average: 1.048314281743 Stdev: 1.864507794380 Max: 13.205075263977 Min: 0.089274853468

DCUAccuracy

g14may.011.dat.j

j14may.011.dat.ownship Average: 1.354067083757 Stdev: 1.999558687210

Max : 13.074008941650 Min : 0.025806976482

SNAPAccuracy

../DCU/j14may.011.dat.1j

s242t0d.dat.digi1J

Average: 5.659192656967 Stdev : 2.526897907257 Max : 10.300320625305

Min : 0.561218559742

SNAPAccuracy

../DCU/j14may.011.dat.2j

s242t0d.dat.digi2J

Average: 7.345124613351 Stdev: 2.499398708344 Max: 11.460121154785 Min: 1.074466347694

SNAPAccuracy ../DCU/j14may.011.dat.3j

s242t0d.dat.digi3J

Average: 7.998973978357 Stdev: 1.927990198135 Max: 10.311155319214 Min : 2.059732437134

SNAPAccuracy

../DCU/j14may.011.dat.1g

s242t0d.dat.digi1G

Average: 23.764146980074

Stdev: 5.865478992462 Max: 40.807685852051 Min: 2.223393917084

SNAPAccuracy

../DCU/j14may.011.dat.2g

s242t0d.dat.digi2G

Average: 25.203603818093 Stdev : 6.009205341339 Max : 38.765033721924 Min : 4.213891983032

SNAPAccuracy

../DCU/j14may.011.dat.3g

s242t0d.dat.digi3G

Average: 25.346159371903 Stdev : 6.380559921265 Max : 42.988975524902 Min : 3.879483699799

SNAPAccuracy

../DCU/g14may.011.dat.1j

s242t0d.dat.digi1J

Average: 23.540215914922 Stdev: 6.391716957092 Max: 38.624015808105 Min: 2.741685390472

SNAPAccuracy

../DCU/g14may.011.dat.2j

s242t0d.dat.digi2J

Average: 25.433439399864 Stdev: 6.376446247101 Max: 39.874137878418 Min: 2.480835437775

SNAPAccuracy

../DCU/g14may.011.dat.3j

s242t0d.dat.digi3J

Average: 25.539387026362 Stdev : 6.010088920593 Max : 40.010002136230 Min : 4.017141342163

SNAPAccuracy

../DCU/g14may.011.dat.1g

s242t0d.dat.digi1G

Average: 5.762049220697 Stdev: 2.827032089233 Max: 18.469625473022 Min: 0.500312924385 **SNAPAccuracy**

../DCU/q14may.011.dat.2q

s242t0d.dat.digi2G

Average: 7.567674700883 Stdev: 2.757918834686 Max : 19.789903640747 Min: 1.288622975349

SNAPAccuracy

../DCU/g14may.011.dat.3g

s242t0d.dat.digi3G

Average: 8.260865872535 Stdev: 2.277982711792 Max : 20.707958221436 Min : 2.297335147858

7.2.12 Stats.012

/usr1/figd/DIS2.2/dis lite3.stats

Frames: 503

Average: 0.00248352 Maximum: 0.01267 2nd Max: 0.006326 Minimum: 0.001582

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 503

Average: 0.00269112 Maximum: 0.012966 2nd Max: 0.008305 Minimum: 0.001582

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway_lit

e2.stats Frames: 503"

Average: 0.00292216 Maximum: 0.014335 2nd Max: 0.000297 Minimum: 0.000297

/sq16/usr1/nets/GATEWAY/gateway_lit

e1.stats Frames: 503

Average: 0.00286979 Maximum: 0.014335 2nd Max: 0.000198 Minimum: 0.000198

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 185 Count: 175 Average: 1515.11 Maximum: 2531.65 2nd Max: 2024.29

Minimum: -110.963

Frames: 317073 Average: 0.000231497 Maximum: 0.010298 2nd Max: 0.010296 Minimum: 9.5e-05

PDUs from Net1: 168 PDUs from Net2: 185

PDU Buffer 1 -- Stats from CircularBuffer ---NumPass: 168 Average: 0.0456276 Variance: 8.51337e-05 Maximum: 0.069108 2nd Max: 0.067527 Minimum: 0.019971 -- End Stats from

PDU Buffer 2 -- Stats from CircularBuffer --NumPass: 185 Average: 0.0458023 Variance: 0.000104608 Maximum: 0.075336 2nd Max: 0.066735 Minimum: 0.008108 -- End Stats from CircularBuffer ---

CircularBuffer --

SNAPPdus.pl Average: 0.027899 Maximum: 0.058573 Minimum: 0.016798 Variance: 0.000314 Std Dev: 0.017732

SNAPTimes.pl s212t0dl.dat Sel-J Tss avg.:

0.00097640836637479206

Sel-J Tns avg.:

0.001144474103637049

Sel-J Tnr avg.:

0.0012829900397517927

Sel-J Trs avg.:

0.0004068904381711036

Sel-J NIU avg.:

0.0024441772905726589

Sel-J Nius avg.:

0.001144474103637049

Sel-J Niur avg.:

0.0012829900397517927

Sel-J Tgs avg.:

0.0013463565741389232

Sel-J Tar ava.:

0.0008663824700926193

DCUAccuracy j14may.012.dat.g q14may.012.dat.ownship Average: 14.611796545501 Stdev: 22.420665740967 Max : 51.954730987549 Min : 0.100044988096

DCUAccuracyLite i14may.012.dat.g g14may.012.dat.ownship 50.0 Average: 1.109252696852 Stdev: 1.334836244583 Max : 13.150731086731 Min : 0.100044988096

DCUAccuracy g14may.012.dat.j i14may.012.dat.ownship Average: 27.387565067072 Stdev: 26.370115280151 Max : 77.838279724121 Min : 0.032249029726

DCUAccuracyLite g14may.012.dat.j j14may.012.dat.ownship 37.0 Average: 1.297667281056

Stdev: 1.091309309006 Max : 3.776655673981 Min : 0.032249029726

SNAPAccuracy

../DCU/j14may.012.dat.1j s212t0dl.dat.digi1J

Average: 0.118388092422 Stdev: 0.651957035065 Max : 12.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/j14may.012.dat.2j

s212t0dl.dat.digi2J

Average: 0.330370026185 Stdev: 0.584085226059 Max : 12.000000000000 Min : 0.00000000000

SNAPAccuracy

../DCU/j14may.012.dat.3j

s212t0dl.dat.digi3J

Average: 0.658926955891 Stdev: 0.722035944462 Max : 12.000000000000 Min : 0.541999995708

SNAPAccuracy

../DCU/j14may.012.dat.1g

s212t0dl.dat.digi1G

Average: 29.596229189550 Stdev: 0.216847062111 Max : 30.000000000000 Min : 29.202999114990

SNAPAccuracy

../DCU/j14may.012.dat.2g

s212t0dl.dat.digi2G

Average: 26.575660006720 Stdev: 2.828056335449 Max : 29.632999420166

Min : 23.589000701904

SNAPAccuracy

../DCU/j14may.012.dat.3g

s212t0dl.dat.digi3G

Average: 29.596229189550 Stdev: 0.216847062111

Max: 30.000000000000

Min : 29.202999114990

SNAPAccuracy

../DCU/g14may.012.dat.1j

s212t0dl.dat.digi1J

Average: 26.865748090144

Stdev: 3.005902290344

Max: 30.018899917603 Min : 21.968999862671

SNAPAccuracy

../DCU/q14may.012.dat.2j

s212t0dl.dat.digi2J

Average: 23.899189297840 Stdev: 6.080121040344

Max : 42.000000000000 Min: 15.977999687195

SNAPAccuracy

../DCU/g14may.012.dat.3j

s212t0dl.dat.digi3J

Average: 29.652512776682 Stdev: 0.439069390297

Max : 35,479000091553

Min : 27.623001098633

SNAPAccuracy

../DCU/q14may.012.dat.1g

s212t0dl.dat.digi1G

Average: 0.065155241013

Stdev: 0.545899391174 Max : 6.000000000000

Min : 0.000000000000

SNAPAccuracy

../DCU/g14may.012.dat.2g

s212t0dl.dat.digi2G

Average: 0.508743562029

Stdev: 0.690413177013

Max : 12.0000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/g14may.012.dat.3g

s212t0dl.dat.digi3G

Average: 0.868925575040

Stdev: 0.836238920689 Max : 12.000000000000

Min : 0.720000028610

7.2.13 Stats.013

/usr1/figd/DIS2.2/dis_lite3.

stats

Frames: 503

Average: 0.0027822

Maximum: 0.010183

2nd Max: 0.001384 Minimum: 0.001384

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.

stats

Frames: 503

Average: 0.00286812 Maximum: 0.009986

2nd Max: 0.001483

Minimum: 0.001483

RateErr: 0

/sq16/usr1/nets/GATEWA

Y/gateway lite2.stats

Frames: 503

Average: 0.00476766

Maximum: 0.019378

2nd Max: 0.000395

Minimum: 0.000395

/sg16/usr1/nets/GATEWA Y/gateway lite1.stats

Frames: 503

Average: 0.0046131

Maximum: 0.019081

2nd Max: 0.000494

Minimum: 0.000297

/sq16/usr1/nets/DISNET/di

snet7.stats

PDUs : 667

Count : 636

Average: 1390.35

Maximum: 3367

2nd Max: 3367

Minimum: -111111

Frames: 207197

Average: 0.000234338

Maximum: 0.011285

2nd Max: 0.010298

PDUs from Net1: 638

Minimum: 8.7e-05

PDUs from Net2: 667

PDU Buffer 1

- Stats from CircularBuffer --

NumPass: 638

Average: 0.0454107

Variance: 0.000104224

Maximum: 0.072863

2nd Max: 0.069998

Minimum: 0.013644

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 667

Average: 0.0454956

Variance: 9.87154e-05

Maximum: 0.073063

2nd Max: 0.070591

Minimum: 0.009195

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.015642

Maximum: 0.036999

Minimum: 0.000030

Variance: 0.000139

Std Dev: 0.011784

SNAPTimes.pl

Sel-J Tss avg.:

0.000977426295194671

Sel-J Tns avg.:

0.0013096832670097468

Sel-J Tnr avg.:

0.0013786035856156447

Sel-J Trs avg.:

0.00054791633451224838

Sel-J NIU avg.:

0.0027267231073265755

Sel-J Tgs avg.:

0.00016819521916039526

Sel-J Tor avg.:

0.00094764143394573453

DCUAccuracy j14may.013.dat.g

g14may.013.dat.ownship

Average: 32.743254758538

Stdev: 31.810739517212

Max : 64.955299377441

Min : 0.107074737549

DCUAccuracyLite i14may.013.dat.g g14may.013.dat.ownship 37.0 Average: 0.962042172368 Stdev: 1.921513438225

Max : 13.431906700134 Min : 0.107074737549

DCUAccuracy g14may.013.dat.i

j14may.013.dat.ownship Average: 32.374255000263 Stdev: 31.898853302002 Max : 64.937286376953 Min : 0.053310412914

DCUAccuracyLite g14may.013.dat.i j14may.013.dat.ownship 37.0

Average: 0.761539308751 Stdev: 1.903268694878 Max : 13.064599990845 Min : 0.053310412914

SNAPAccuracy

../DCU/j14may.013.dat.1j s222t0dl.dat.digi1J

Average: 0.081924558101 Stdev: 0.266580671072 Max : 6.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/j14may.013.dat.2j s222t0dl.dat.digi2J

Average: 0.378462895691 Stdev: 0.629407286644 Max : 12.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/j14may.013.dat.3j s222t0dl.dat.digi3J

Average: 6.976177672066 Stdev: 2.749457359314 Max: 33.360149383545 Min : 1.952657938004

SNAPAccuracy

../DCU/i14may.013.dat.1g s222t0dl.dat.digi1G

Average: 15.728004411813 Stdev: 10.645091056824 Max: 30.031200408936 Min : 0.108800001442

SNAPAccuracy

../DCU/j14may.013.dat.2g s222t0dl.dat.digi2G

Average: 18.776156489032

Stdev: 11.568562507629 Max : 30.031200408936 Min: 0.123999997973

SNAPAccuracy

../DCU/j14may.013.dat.3g

s222t0dl.dat.digi3G

Average:

23.637010798562

Stdev: 5.588778495789 Max : 42.876018524170 Min: 4.383477210999

SNAPAccuracy

../DCU/q14may.013.dat.1j

s222t0dl.dat.digi1J

Average:

14.403209305792

Stdev: 9.049633026123 Max : 30.000000000000 Min : 0.024800000712

SNAPAccuracy

../DCU/g14may.013.dat.2j s222t0dl.dat.digi2J

Average:

18.742272310381

Stdev: 11.557089805603 Max : 30.026100158691 Min: 0.186999991536

SNAPAccuracy

../DCU/q14may.013.dat.3j s222t0dl.dat.digi3J

Average:

22.987435926402

Stdev: 5.731228828430 Max : 55.874702453613 Min : 4.462239265442

SNAPAccuracy

../DCU/g14may.013.dat.1g

s222t0dl.dat.digi1G Average: 0.045628252936 Stdev: 0.599764108658 Max : 12.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/g14may.013.dat.2g s222t0dl.dat.digi2G

Average: 0.457874654766 Stdev: 0.629286468029 Max : 12.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/g14may.013.dat.3g s222t0dl.dat.digi3G

Average: 8.163564747596 Stdev: 2.219929695129 Max: 33.360149383545 Min : 2.221807718277

7.2.14 Stats.014

/usr1/figd/DIS2.2/dis lite3.stats

Frames: 503

Average: 0.0027822 Maximum: 0.010183 2nd Max: 0.001384 Minimum: 0.001384

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 503

Average: 0.00286812 Maximum: 0.009986 2nd Max: 0.001483 Minimum: 0.001483

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway_lit

e2.stats Frames: 503

Average: 0.00476766 Maximum: 0.019378 2nd Max: 0.000395 Minimum: 0.000395

/sg16/usr1/nets/GATEWAY/gateway lit

e1.stats Frames: 503 Average: 0.0046131 Maximum: 0.019081 2nd Max: 0.000494 Minimum: 0.000297

/sq16/usr1/nets/DISNET/disnet7.stats

PDUs : 667 Count : 636 Average: 1390.35 Maximum: 3367 2nd Max: 3367 Minimum: -111111

Frames: 207197 Average: 0.000234338 Maximum: 0.011285 2nd Max: 0.010298 Minimum: 8.7e-05

PDUs from Net1: 638 PDUs from Net2: 667 PDU Buffer 1

-- Stats from CircularBuffer --NumPass: 638 Average: 0.0454107 Variance: 0.000104224 Maximum: 0.072863 2nd Max: 0.069998

Minimum: 0.013644
-- End Stats from CircularBuffer --

PDU Buffer 2

 Stats from CircularBuffer --NumPass: 667
 Average: 0.0454956
 Variance: 9.87154e-05
 Maximum: 0.073063

2nd Max: 0.070591 Minimum: 0.009195

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.015642 Maximum: 0.036999 Minimum: 0.000030 Variance: 0.000139 Std Dev: 0.011784

SNAPTimes.pl Sel-J Tss avg.:

0.000977426295194671

Sel-J Tns avg.:

0.0013096832670097468

Sel-J Tnr avg.:

0.0013786035856156447

Sel-J Trs avg.:

0.00054791633451224838

Sel-J NIU avg.:

0.0027267231073265755

Sel-J Nius avg.:

0.0013096832670097468

Sel-J Niur avg.:

0.0013786035856156447

Sel-J Tgs avg.:

0.002280836653439059

Sel-J Tgr avg.:

0.0015247231071935021

DCUAccuracy j14may.013.dat.g g14may.013.dat.ownship Average: 32.743254758538 Stdev: 31.810739517212

Max : 64.955299377441 Min : 0.107074737549

DCUAccuracyLite j14may.013.dat.g g14may.013.dat.ownship 37.0

Average: 0.962042172368 Stdev: 1.921513438225 Max: 13.431906700134 Min : 0.107074737549

DCUAccuracy g14may.013.dat.j

j14may.013.dat.ownship

Average:

32.374255000263

Stdev: 31.898853302002 Max: 64.937286376953

Min : 0.053310412914

DCUAccuracyLite g14may.013.dat.j

j14may.013.dat.ownship

37.0

Average: 0.761539308751 Stdev : 1.903268694878 Max : 13.064599990845

Min : 0.053310412914

SNAPAccuracy

../DCU/j14may.013.dat.1j s222t0dl.dat.digi1J

Average: 0.081924558101

Stdev: 0.266580671072 Max: 6.0000000000000

Min : 0.000000000000

SNAPAccuracy

../DCU/j14may.013.dat.2j

s222t0dl.dat.digi2J

Average: 0.378462895691 Stdev: 0.629407286644 Max: 12.000000000000

Min : 0.000000000000

SNAPAccuracy

../DCU/j14may.013.dat.3j

s222t0dl.dat.digi3J

Average: 6.976177672066 Stdev: 2.749457359314 Max: 33.360149383545 Min: 1.952657938004

SNAPAccuracy

../DCU/j14may.013.dat.1g s222t0dl.dat.digi1G

Average:

15.728004411813

Stdev: 10.645091056824 Max: 30.031200408936

Min: 0.108800001442

SNAPAccuracy

../DCU/j14may.013.dat.2g s222t0dl.dat.digi2G

Average:

18.776156489032

Stdev: 11.568562507629

Max : 30.031200408936 Min : 0.123999997973

SNAPAccuracy

../DCU/j14may.013.dat.3g

s222t0dl.dat.digi3G

Average: 23.637010798562 Stdev: 5.588778495789 Max: 42.876018524170 Min: 4.383477210999

SNAPAccuracy

../DCU/g14may.013.dat.1j

s222t0dl.dat.digi1J

Average: 14.403209305792 Stdev : 9.049633026123 Max : 30.000000000000 Min : 0.024800000712

SNAPAccuracy

../DCU/g14may.013.dat.2j

s222t0dl.dat.digi2J

Average: 18.742272310381 Stdev: 11.557089805603 Max: 30.026100158691 Min: 0.186999991536

SNAPAccuracy

../DCU/g14may.013.dat.3j

s222t0dl.dat.digi3J

Average: 22.987435926402 Stdev: 5.731228828430 Max: 55.874702453613 Min: 4.462239265442

SNAPAccuracy

../DCU/g14may.013.dat.1g

s222t0dl.dat.digi1G

Average: 0.045628252936 Stdev: 0.599764108658 Max: 12.000000000000

Min : 0.00000000000

SNAPAccuracy

../DCU/g14may.013.dat.2g

s222t0dl.dat.digi2G

Average: 0.457874654766 Stdev: 0.629286468029 Max: 12.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/g14may.013.dat.3g

s222t0dl.dat.digi3G

Average: 8.163564747596 Stdev: 2.219929695129 Max: 33.360149383545 Min: 2.221807718277

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7.2.15 Stats.015

/usr1/figd/DIS2.2/dis lite3.stats

Frames: 503

Average: 0.00280813 Maximum: 0.008304 2nd Max: 0.003956 Minimum: 0.001582

RateErr: 0

/usr1/figd/DIS2.2/dis lite4.stats

Frames: 503

Average: 0.00299948 Maximum: 0.012571 2nd Max: 0.008403 Minimum: 0.001483

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway lit

e2.stats Frames: 502

Average: 0.00732812 Maximum: 0.022556 2nd Max: 0.016906 Minimum: 0.000296

/sg16/usr1/nets/GATEWAY/gateway_lit

e1.stats Frames: 503

Average: 0.00702322 Maximum: 0.01651 2nd Max: 0.015324 Minimum: 0.000395

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 1582 Count: 1229 Average: 1577.13 Maximum: 3378.38 2nd Max: 2531.65 Minimum: -4830.92

Frames: 231129 Average: 0.00024515 Maximum: 0.010594 2nd Max: 0.010298 Minimum: 9.5e-05

PDUs from Net1: 1551 PDUs from Net2: 1582

PDU Buffer 1

- Stats from CircularBuffer --

NumPass: 1551 Average: 0.0453097 Variance: 9.68542e-05

Maximum: 0.073655 2nd Max: 0.070591 Minimum: 0.000296 -- End Stats from CircularBuffer ---

PDU Buffer 2 -- Stats from CircularBuffer ---NumPass: 1582 Average: 0.045422 Variance: 0.000101087 Maximum: 0.078401 2nd Max: 0.077809 Minimum: 0.017303 -- End Stats from

SNAPPdus.pl Average: 0.063886 Maximum: 1.826070 Minimum: 0.000001 Variance: 0.012977

CircularBuffer --

Std Dev: 0.113915

SNAPTimes.pl s242t0dl.dat Sel-J Tss avg.:

0.00098196812725646334

Sel-J Tns avg.:

0.0011558207172266879

Sel-J Tnr avg.: 0.001557233067952 Sel-J Trs avg.:

0.0003969541834507312

Sel-J NIU avg.:

0.0027475219123509332

Sel-J Nius avg.:

0.0011558207172266879

Sel-J Niur avg.: 0.001557233067952

Sel-J Tgs avg.:

0.0036214422313978829 Sel-J Tgr avg.:

0.0026479083663504292

DCUAccuracy i14may.015.dat.g q14may.015.dat.ownship

Average:

32.815771649874

Stdev: 31.604993820190 Max : 64.977813720703 Min : 0.100841462612

DCUAccuracyLite i14may.015.dat.g g14may.015.dat.ownship Average: 1.348052345276 Stdev: 1.062993884087 Max : 3.662668943405 Min : 0.100841462612

DCUAccuracy g14may.015.dat.i

j14may.015.dat.ownship Average: 26.356230735537 Stdev: 25.602380752563 Max : 64.868812561035 Min : 0.056435804814

DCUAccuracyLite g14may.015.dat.i j14may.015.dat.ownship 38.0

Average: 1.281786997955 Stdev: 1.096155166626 Max : 3.776759147644 Min : 0.056435804814

SNAPAccuracy

../DCU/j14may.015.dat.1j s242t0dl.dat.digi1J

Average: 4.932062401498 Stdev: 2.447875976562 Max: 33.360149383545 Min : 0.633206844330

SNAPAccuracy

../DCU/i14mav.015.dat.2i s242t0dl.dat.digi2J

Average: 7.150407730214 Stdev: 2.697808265686

Max : 33.360149383545 Min : 1.349184155464

SNAPAccuracy

../DCU/j14may.015.dat.3j s242t0dl.dat.digi3J

Average: 8.324657902152 Stdev: 2.014668703079 Max: 33.360149383545 Min : 2.448955059052

SNAPAccuracy

../DCU/j14may.015.dat.1g s242t0dl.dat.digi1G

Average: 22.710296503445 Stdev: 7.985925674438 Max: 80.026969909668

Min : 3.204645395279

SNAPAccuracyLite

../DCU/j14may.015.dat.1g s242t0dl.dat.digi1G 50.0 Average: 21.956367582941 Stdev : 5.423428535461 Max: 34.317218780518 Min: 3.204645395279

SNAPAccuracy

../DCU/j14may.015.dat.2g

s242t0dl.dat.digi2G

Average: 23.440008351473 Stdev: 8.722679138184 Max: 83.683723449707 Min: 4.081444740295

SNAPAccuracyLite ../DCU/j14may.015.dat.2g

s242t0dl.dat.digi2G 50.0 Average: 22.697427508272 Stdev: 5.639806270599 Max: 37.955646514893 Min: 4.081444740295

SNAPAccuracy

../DCU/j14may.015.dat.3g

s242t0dl.dat.digi3G

Average: 23.847204794507 Stdev: 7.813976764679 Max: 67.053703308105 Min: 4.978455066681

SNAPAccuracyLite

../DCU/j14may.015.dat.3g s242t0dl.dat.digi3G 50.0 Average: 23.095120274331 Stdev: 5.545478820801 Max: 39.101238250732 Min: 4.978455066681

SNAPAccuracy

../DCU/g14may.015.dat.1j

s242t0dl.dat.digi1J Average: 22.730337130371

Stdev: 7.608106613159 Max: 68.669021606445 Min: 3.231025695801

SNAPAccuracyLite

../DCU/g14may.015.dat.1j s242t0dl.dat.digi1J 50.0 Average: 22.090588242919 Stdev : 5.466846942902 Max : 34.155849456787

Min : 3.231025695801

SNAPAccuracy

../DCU/g14may.015.dat.2j

s242t0dl.dat.digi2J

Average: 23.362158901068 Stdev: 7.980180740356 Max: 80.026969909668 Min: 4.169361114502

SNAPAccuracyLite ../DCU/g14may.015.dat.2j

s242t0dl.dat.digi2J 50.0

Average:

22.616722161991

Stdev: 5.493623256683 Max: 36.136238098145

Min : 4.169361114502

SNAPAccuracy

../DCU/g14may.015.dat.3j s242t0dl.dat.digi3J

Average:

23.269096656681

Stdev: 6.146852493286 Max: 68.669334411621 Min: 5.558022499084

SNAPAccuracyLite

../DCU/g14may.015.dat.3j s242t0dl.dat.digi3J 50.0

Average:

23.083223108920

Stdev: 5.437006950378 Max: 37.695899963379 Min: 5.558022499084

SNAPAccuracy

../DCU/g14may.015.dat.1g s242t0dl.dat.digi1G

Average: 4.703103716704 Stdev: 2.248970746994

Max : 33.360149383545 Min : 0.736549377441

SNAPAccuracy

../DCU/g14may.015.dat.2g s242t0dl.dat.digi2G

Average: 6.899521992720 Stdev: 2.704041957855 Max: 33.360149383545

Min : 1.500370979309

SNAPAccuracy

../DCU/g14may.015.dat.3g

s242t0dl.dat.digi3G

Average: 8.359303667752

Stdev: 1.967190742493 Max: 33.360149383545 Min: 2.643815755844

7.2.16 Stats.016

/sg16/usr1/nets/GATEWA Y/gateway1.stats

Frames: 490

Average: 0.00131273 Maximum: 0.005734 2nd Max: 0.004845 Minimum: 0.001087

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 489

Average: 0.00131514 Maximum: 0.011088 2nd Max: 0.011088 Minimum: 0.000989

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 18 Count: 13

Average: 1956.45 Maximum: 2531.65 2nd Max: 2531.65 Minimum: 1443

Frames: 198059

Average: 0.000205954 Maximum: 0.010297 2nd Max: 0.010198 Minimum: 9.4e-05

PDUs from Net1: 18 PDUs from Net2: 18

PDU Buffer 1

- Stats from CircularBuffer --

NumPass: 18

Average: 0.0472694 Variance: 8.59945e-05 Maximum: 0.066537 2nd Max: 0.04538 Minimum: 0.031638

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 18

Average: 0.0479555 Variance: 0.00012729 Maximum: 0.060506 2nd Max: 0.059913 Minimum: 0.023728

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.051503 Maximum: 0.068727 Minimum: 0.027088 Variance: 0.000097 Std Dev: 0.009846

SNAPTimes.pl s213t3.dat

Sel-J Tss avg.:

0.00097739641431513142

Sel-J Tns avg.:

0.00088822710187154896

Sel-J Tnr avg.:

0.002960091633481007

Sel-J Trs avg.:

0.00054200996022831015

Sel-J NIU avg.:

0.0038483187353525561

Sel-J Nius avg.:

0.00088822710187154896

Sel-J Niur avg.:

0.002960091633481007

Sel-J Tgs avg.:

0.00033878884437671153

Sel-J Tgr avg.:

0.00046004382495149653

DCUAccuracy j14may.016.dat.g g14may.016.dat.ownship

Average: 12.532610196011 Stdev: 1.180660843849 Max: 16.497161865234

Min : 0.571182966232

DCUAccuracy g14may.016.dat.j

j14may.016.dat.ownship Average: 12.880272589053 Stdev: 1.089531302452 Max: 16.773874282837 Min: 0.373471528292

SNAPAccuracy

../DCU/j14may.016.dat.1j

s213t3.dat.digi1J

Average: 0.012320328542 Stdev: 0.271606653929 Max: 6.00000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/j14may.016.dat.2j

s213t3.dat.digi2J

Average: 4.238193018480 Stdev: 2.732558965683 Max: 6.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/j14may.016.dat.3j

s213t3.dat.digi3J

SNAPAccuracy

../DCU/j14may.016.dat.1g

s213t3.dat.digi1G

Average: 40.275735946854 Stdev: 33.274059295654 Max: 72.461997985840 Min : 0.082999996841

SNAPAccuracy

../DCU/j14may.016.dat.2g

s213t3.dat.digi2G

Average:

40.208262442496

Stdev: 33.272731781006 Max: 72.461997985840

Min : 0.082999996841

SNAPAccuracy

../DCU/j14may.016.dat.3g

s213t3.dat.digi3G

Average:

40.208262442496

Stdev: 33.272731781006 Max: 72.461997985840

Min: 0.082999996841

SNAPAccuracy

../DCU/g14may.016.dat.1j

s213t3.dat.digi1J

Average: 6.738220928819 Stdev: 0.986331224442 Max: 7.763400077820

Min : 0.065999999642

SNAPAccuracy

../DCU/g14may.016.dat.2j

s213t3.dat.digi2J

Average:

40.420345428028

Stdev: 33.119426727295
Max: 72.335998535156
Min: 0.065999999642

SNAPAccuracy

../DCU/g14may.016.dat.3j

s213t3.dat.digi3J

Average:

40.407937560053

Stdev: 33.133419036865 Max: 72.335998535156 Min: 0.063000001013

SNAPAccuracy

../DCU/g14may.016.dat.1g

s213t3.dat.digi1G

Average: 3.203285420945 Stdev: 2.993104696274 Max: 6.00000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/g14may.016.dat.2g

s213t3.dat.digi2G

Max : 6.000000000000 Min : 6.000000000000

SNAPAccuracy

../DCU/g14may.016.dat.3g

s213t3.dat.digi3G

7.2.17 Stats.017

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 481

Average: 0.00213948 Maximum: 0.008306 2nd Max: 0.003757 Minimum: 0.001088

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 481

Average: 0.00196026 Maximum: 0.008206 2nd Max: 0.003164 Minimum: 0.00089

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 454 Count: 444 Average: 1738.9 Maximum: 3378.38 2nd Max: 2531.65 Minimum: -4830.92

Frames: 178841 Average: 0.000207803 Maximum: 0.010594 2nd Max: 0.010198 Minimum: 8.8e-05

PDUs from Net1: 456 PDUs from Net2: 455

PDU Buffer 1

- Stats from CircularBuffer -

NumPass: 456 Average: 0.0456021 Variance: 0.000104045 Maximum: 0.074348 2nd Max: 0.074249 Minimum: 0.019477 -- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 455 Average: 0.0452435 Variance: 0.000118497 Maximum: 0.076621 2nd Max: 0.073161 Minimum: 0.015423

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.047894 Maximum: 0.079044 Minimum: 0.018004 Variance: 0.000112 Std Dev: 0.010561

SNAPTimes.pl s223t3.dat |

SNAPCodeTimes.pl

Sel-J Tss avg.: 0.00098098406335223

Sel-J Tns avg.:

0.00088822710187154896

Sel-J Tnr avg.:

0.002960091633481007

Sel-J Trs avg.:

0.00038799601597168788

Sel-J NIU avg.:

0.0038483187353525561

Sel-J Nius avg.:

0.00088822710187154896

Sel-J Niur avg.:

0.002960091633481007

Sel-J Tgs avg.:

0.00074876095618764166

Sel-J Tgr avg.:

0.00073954980082154107

DCUAccuracy j14may.017.dat.g

g14may.017.dat.ownship Average: 13.707808048916 Stdev: 3.102029800415 Max: 27.207519531250 Min: 6.206263065338

DCUAccuracy g14may.017.dat.j

j14may.017.dat.ownship Average: 14.202172299520 Stdev: 3.255482196808 Max: 28.333656311035 Min: 6.640846252441

SNAPAccuracy

../DCU/j14may.017.dat.1j

s223t3.dat.digi1J

Average: 0.012552301255 Stdev: 0.274146407843 Max: 6.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/j14may.017.dat.2j

s223t3.dat.digi2J

Average: 5.485355648536

Stdev: 1.680180788040 Max: 6.0000000000000

Min : 0.000000000000

SNAPAccuracy

../DCU/j14may.017.dat.3j

s223t3.dat.digi3J

Average:

13.563161452111

Stdev: 2.588978290558 Max: 16.838010787964

Min : 9.338472366333

SNAPAccuracy

../DCU/j14may.017.dat.1g

s223t3.dat.digi1G

Average: 7.081524823788

Stdev: 1.259095668793 Max: 8.466890335083 Min: 5.297699928284

SNAPAccuracy

../DCU/j14may.017.dat.2g

s223t3.dat.digi2G

Average: 7.083168869543

Stdev: 1.258590817451 Max: 8.466890335083 Min: 5.297699928284

SNAPAccuracy

../DCU/j14may.017.dat.3g

s223t3.dat.digi3G

Average:

19.995239415078

Stdev: 2.754493474960 Max: 28.686658859253

Min : 12.926452636719

SNAPAccuracy

../DCU/g14may.017.dat.1j

s223t3.dat.digi1J

Average: 7.284393238971 Stdev : 1.316969394684

Stdev: 1.316969394684 Max: 8.747519493103

Min : 5.494299888611

SNAPAccuracy

../DCU/g14may.017.dat.2j

s223t3.dat.digi2J

Average: 7.284393238971 Stdev: 1.316969394684

Max : 8.747519493103

Min : 5.494299888611

SNAPAccuracy

../DCU/g14may.017.dat.3j

s223t3.dat.digi3J

Average: 20.430639319390 Stdev: 2.707842826843

Max : 31.891571044922

Min : 13.694419860840

SNAPAccuracy

../DCU/g14may.017.dat.1g

s223t3.dat.digi1G

Average: 4.882845188285

Stdev: 2.335571527481 Max: 6.0000000000000

Min : 0.00000000000

SNAPAccuracy

../DCU/g14may.017.dat.2g

s223t3.dat.digi2G

Average: 6.000000000000

Min : 6.00000000000

SNAPAccuracy

../DCU/q14may.017.dat.3q

s223t3.dat.digi3G

Average: 13.563159864654

Stdev: 2.588980197906 Max: 16.838010787964

Min : 9.338425636292

7.2.18 Stats.018

/sg16/usr1/nets/GATEWAY/gateway1.s tats

Frames: 493

Average: 0.00297141 Maximum: 0.015325 2nd Max: 0.004449

Minimum: 0.001186

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 494

Average: 0.00272158 Maximum: 0.015225 2nd Max: 0.003659

Minimum: 0.001185

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 917 Count: 782 Average: 1854

Maximum: 3378.38

2nd Max: 3355.7 Minimum: -4830.92

Frames: 157925 Average: 0.000214245 Maximum: 0.011187 2nd Max: 0.011088 Minimum: 8.8e-05

PDUs from Net1: 915 PDUs from Net2: 917

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 915 Average: 0.0455657 Variance: 0.000110006 Maximum: 0.073853 2nd Max: 0.06932 Minimum: 0.012457

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 917 Average: 0.0450602 Variance: 9.92749e-05 Maximum: 0.081664 2nd Max: 0.078007 Minimum: 0.017896

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.048182 Maximum: 0.085235 Minimum: 0.015231 Variance: 0.000107 Std Dev: 0.010325

SNAPTimes.pl s233t3.dat

Sel-J Tss avg.:

0.00097844422323187718

Sel-J Tns avg.:

0.00088822710187154896

Sel-J Tnr avg.:

0.002960091633481007

Sel-J Trs avg.:

0.00054357569688254876

Sel-J NIU avg.:

0.0038483187353525561

Sel-J Nius avg.:

0.00088822710187154896

Sel-J Niur avg.:

0.002960091633481007

Sel-J Tgs avg.:

0.0011922808762501083

Sel-J Tgr avg.:

0.001175802788761884

DCUAccuracy j14may.018.dat.g g14may.018.dat.ownship

Average:

12.596610725293

Stdev: 0.422053277493 Max: 15.603322982788 Min: 12.068299293518

DCUAccuracy g14may.018.dat.j

j14may.018.dat.ownship

Average:

12.978587500582

Stdev: 0.420221060514 Max: 16.211809158325 Min: 12.337481498718

SNAPAccuracy

../DCU/j14may.018.dat.1j

s233t3.dat.digi1J

Average: 0.012219959267 Stdev: 0.270500332117 Max: 6.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/j14may.018.dat.2j

s233t3.dat.digi2J

Average:

13.449836734850

Stdev: 2.644958257675 Max: 16.838010787964 Min: 9.241168975830

SNAPAccuracy

../DCU/j14may.018.dat.3j

s233t3.dat.digi3J

Average:

13.449869638560

Stdev: 2.644989252090 Max: 16.838010787964 Min: 9.241168975830

SNAPAccuracy

../DCU/j14may.018.dat.1g

s233t3.dat.digi1G

Average: 6.966598762379 Stdev: 1.202947139740 Max: 8.335450172424 Min: 5.530000209808

SNAPAccuracy

../DCU/j14may.018.dat.2g

s233t3.dat.digi2G

Average:

19.631048224056

Stdev: 2.822427511215 Max: 29.728492736816 Min: 13.351221084595

SNAPAccuracy

../DCU/j14may.018.dat.3g

s233t3.dat.digi3G

Average: 19.972658480462 Stdev: 2.943347454071 Max: 33.133510589600 Min: 13.185977935791

SNAPAccuracy

../DCU/g14may.018.dat.1j

s233t3.dat.digi1J

Average: 7.205493405125 Stdev: 1.278209447861 Max: 8.651630401611 Min: 5.481999874115

SNAPAccuracy

../DCU/g14may.018.dat.2j

s233t3.dat.digi2J

Average: 20.193198591409 Stdev: 2.729329347610 Max: 29.771516799927 Min: 13.314785003662

SNAPAccuracy

../DCU/q14may.018.dat.3i

s233t3.dat.digi3J

Average: 20.303775244644 Stdev: 2.685832977295 Max: 29.619695663452 Min: 13.314785003662

SNAPAccuracy

../DCU/g14may.018.dat.1g

s233t3.dat.digi1G

Average: 5.816700610998 Stdev: 1.032568454742 Max: 6.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/g14may.018.dat.2g

s233t3.dat.digi2G

Average: 13.449867478196 Stdev: 2.644990921021 Max: 16.838010787964 Min: 9.241168975830

SNAPAccuracy

../DCU/g14may.018.dat.3g

s233t3.dat.digi3G

Average: 13.449867820740 Stdev: 2.644991397858 Max: 16.838010787964 Min: 9.241168975830

7.2.19 Stats.019

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 501

Average: 0.00377925 Maximum: 0.012768 2nd Max: 0.010085 Minimum: 0.001087

/sq16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 501

Average: 0.00355212 Maximum: 0.012867 2nd Max: 0.009591 Minimum: 0.001087

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 1392 Count: 1048 Average: 1915.89 Maximum: 3836.32 2nd Max: 3378.38 Minimum: -492.55

Frames: 156139 Average: 0.000228415 Maximum: 0.011088 2nd Max: 0.010198 Minimum: 1.9e-05

PDUs from Net1: 1388 PDUs from Net2: 1394

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 1388 Average: 0.0457498 Variance: 0.000104746 Maximum: 0.078204 2nd Max: 0.074446 Minimum: 0.009096

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 1394 Average: 0.0452585 Variance: 0.000105107 Maximum: 0.076425 2nd Max: 0.075733 Minimum: 0.01206

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.049065 Maximum: 0.081661 Minimum: 0.001952 Variance: 0.000117 Std Dev: 0.010824

SNAPTimes.pl Sel-J Tss avg.:

0.00097002390436656523

Sel-J Tns avg.:

0.00088822710187154896

Sel-J Tnr avg.:

0.002960091633481007

Sel-J Trs avg.:

0.00063089641408004102

Sel-J NIU avg.:

0.0038483187353525561

Sel-J Nius avg.:

0.00088822710187154896

Sel-J Niur avg.:

0.002960091633481007

Sel-J Tgs avg.:

0.0016961274901057123

Sel-J Tgr avg.:

0.0014920577694037169

DCUAccuracy j14may.019.dat.g g14may.019.dat.ownship Average:

14.101141862058

Stdev: 4.017563343048 Max : 31.341869354248 Min : 12.065686225891

DCUAccuracy g14may.019.dat.j j14may.019.dat.ownship Average: 13.927347767426

Stdev: 3.106972217560 Max : 30.983718872070 Min: 12.386458396912

SNAPAccuracy

../DCU/i14may.019.dat.1i

s243t3.dat.digi1J

Average: 3.918491256742 Stdev: 6.009781360626 Max : 16.832506179810 Min : 0.000000000000

SNAPAccuracy

../DCU/j14may.019.dat.2j

s243t3.dat.digi2J

Average:

13.389944648359

Stdev: 2.673644065857 Max: 16.838010787964 Min: 9.170569419861

SNAPAccuracy

../DCU/j14may.019.dat.3j

s243t3.dat.digi3J

Average: 13.389977340007 Stdev: 2.673674583435 Max : 16.838010787964 Min: 9.170519828796

SNAPAccuracy

../DCU/j14may.019.dat.1g

s243t3.dat.digi1G

Average: 19.649107988916 Stdev: 2.950942754745 Max: 32.433429718018 Min : 12.934171676636

SNAPAccuracy

../DCU/j14may.019.dat.2g

s243t3.dat.digi2G

Average: 20.137575995320 Stdev: 3.240345478058 Max: 32.879703521729 Min: 13.233886718750

SNAPAccuracy

../DCU/j14may.019.dat.3g

s243t3.dat.digi3G

Average: 20.045525452585 Stdev: 2.904620409012 Max : 32.433429718018 Min : 13.233886718750

SNAPAccuracy

../DCU/g14may.019.dat.1j

s243t3.dat.digi1J

Average: 19.964813870131 Stdev: 2.727392435074 Max : 29.915128707886 Min : 11.226552009583

SNAPAccuracy

../DCU/g14may.019.dat.2j

s243t3.dat.diqi2J

Average: 20.170726240524 Stdev: 2.662208557129 Max : 29.426181793213 Min : 11.226691246033

SNAPAccuracy

../DCU/g14may.019.dat.3j

s243t3.dat.digi3J

Average: 20.271581603448 Stdev: 2.715926170349 Max : 29.426059722900 Min: 13.267064094543

SNAPAccuracy

../DCU/g14may.019.dat.1g

s243t3.dat.digi1G

Average: 13.389943740737 Stdev: 2.673645973206 Max: 16.838010787964 Min: 9.170610427856

SNAPAccuracy

../DCU/g14may.019.dat.2g

s243t3.dat.digi2G

Average: 13.389975039292 Stdev: 2.673676490784 Max: 16.838010787964 Min: 9.170610427856

SNAPAccuracy

../DCU/g14may.019.dat.3g

s243t3.dat.digi3G

Average: 13.389975377012 Stdev : 2.673676967621 Max : 16.838010787964 Min : 9.170610427856

7.2.20 Stats.020

/sg16/usr1/nets/GATEWAY/gateway_lit

e2.stats Frames : 493

Average: 0.00152525 Maximum: 0.011483 2nd Max: 0.008799 Minimum: 0.000584

/sg16/usr1/nets/GATEWAY/gateway_lit

e1.stats Frames: 494

Average: 0.00147739 Maximum: 0.010678 2nd Max: 0.004453 Minimum: 0.000784

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 21 Count: 14 Average: 2139.25 Maximum: 2528.45 2nd Max: 2528.45 Minimum: 1124.86

Frames: 223045 Average: 0.000211855 Maximum: 0.010297 2nd Max: 0.010297 Minimum: 1.9e-05 PDUs from Net1: 21 PDUs from Net2: 21

PDU Buffer 1
-- Stats from
CircularBuffer --

NumPass: 21 Average: 0.0527475 Variance: 0.000194167 Maximum: 0.069997 2nd Max: 0.06891 Minimum: 0.030846 -- End Stats from

PDU Buffer 2

CircularBuffer --

Stats from
CircularBuffer ---

NumPass: 21

Average: 0.0456999
Variance: 6.11765e-05
Maximum: 0.056057
2nd Max: 0.056057
Minimum: 0.03134
-- End Stats from
CircularBuffer --

SNAPPdus.pl

Average: 1.794722 Maximum: 4.961020 Minimum: 0.001551 Variance: 5.230645 Std Dev: 2.287060

SNAPTimes.pl s213t3l.dat

Sel-J Tss avg.:

0.0009174741035783237

Sel-J Tns avg.:

0.00088822710187154896

Sel-J Tnr avg.:

0.002960091633481007

Sel-J Trs avg.:

0.00040215737049201634

Sel-J NIU avg.:

0.0038483187353525561

Sel-J Nius avg.:

0.00088822710187154896

Sel-J Niur avg.:

0.002960091633481007

Sel-J Tgs avg.:

0.00050304980086583826

Sel-J Tgr avg.:

0.00037751394404359048

DCUAccuracy j14may.020.dat.g

g14may.020.dat.ownship

Average: 33.541392431421 Stdev: 19.481071472168 Max: 90.789398193359 Min: 12.717759132385

DCUAccuracyLite j14may.020.dat.g

g14may.020.dat.ownship Average: 13.008607744097 Stdev: 0.134688988328 Max: 13.258233070374 Min: 12.717759132385

DCUAccuracy g14may.020.dat.j

j14may.020.dat.ownship Average: 41.185510269931 Stdev: 25.439907073975 Max: 65.158271789551 Min: 13.100765228271

DCUAccuracyLite g14may.020.dat.j

j14may.020.dat.ownship 38.0 Average: 13.368693347450 Stdev: 0.132746040821 Max: 13.636923789978 Min: 13.100765228271

SNAPAccuracy

../DCU/j14may.020.dat.1j

s213t3l.dat.digi1J

Average: 0.012195121951 Stdev : 0.270225852728 Max : 6.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/j14may.020.dat.2j

s213t3l.dat.digi2J

Average: 5.878048780488 Stdev: 0.846661210060 Max: 6.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/j14may.020.dat.3j

s213t3l.dat.digi3J

SNAPAccuracy

../DCU/j14may.020.dat.1g

s213t3l.dat.digi1G

Average: 15.024348746558 Stdev: 8.899758338928 Max: 24.000000000000 Min: 5.821000099182 SNAPAccuracy

../DCU/j14may.020.dat.2g

s213t3l.dat.digi2G

Average: 15.073111697299 Stdev: 8.916471481323 Max: 30.000000000000 Min: 5.821000099182

SNAPAccuracy

../DCU/j14may.020.dat.3g

s213t3l.dat.digi3G

Average: 15.073111697299 Stdev: 8.916471481323 Max: 30.000000000000 Min: 5.821000099182

SNAPAccuracy

../DCU/g14may.020.dat.1j

s213t3l.dat.digi1J

Average: 29.801111330752 Stdev: 0.545261263847 Max: 30.031200408936 Min: 18.000000000000

SNAPAccuracy

../DCU/g14may.020.dat.2j

s213t3l.dat.digi2J

Average: 31.370922289006 Stdev: 8.309113502502 Max: 96.000000000000 Min: 29.611999511719

SNAPAccuracy

../DCU/g14may.020.dat.3j

s213t3l.dat.digi3J

Average: 31.273341465366 Stdev: 8.439249038696 Max: 96.000000000000 Min: 6.195069789886

SNAPAccuracy

../DCU/g14may.020.dat.1g

s213t3l.dat.digi1G

Average: 5.780487804878 Stdev : 1.126449108124 Max : 6.000000000000 Min : 0.0000000000000

SNAPAccuracy

../DCU/g14may.020.dat.2g

s213t3l.dat.digi2G

SNAPAccuracy

../DCU/g14may.020.dat.3g

s213t3l.dat.digi3G

Min : 6.000000000000

7.2.21 Stats.021

/sg16/usr1/nets/GATEWA Y/gateway_lite2.stats

Frames : 499

Average: 0.00214257 Maximum: 0.009392 2nd Max: 0.004349 Minimum: 0.001384

/sg16/usr1/nets/GATEWA Y/gateway lite1.stats

Frames: 499

Average: 0.00228701 Maximum: 0.012373 2nd Max: 0.007712 Minimum: 0.001285

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs: 477 Count: 468 Average: 1774.54 Maximum: 10638.3 2nd Max: 3367 Minimum: -108.589

Frames: 150525 Average: 0.000211098 Maximum: 0.010198 2nd Max: 0.0101 Minimum: 1.8e-05

PDUs from Net1: 479 PDUs from Net2: 477

PDU Buffer 1
-- Stats from
CircularBuffer -NumPass: 479

Average: 0.0450309
Variance: 9.90951e-05
Maximum: 0.077018
2nd Max: 0.067539
Minimum: 0.010875
- End Stats from

End Stats fromCircularBuffer —

PDU Buffer 2
-- Stats from
CircularBuffer --

NumPass: 477 Average: 0.0449742 Variance: 8.85831e-05 Maximum: 0.075138 2nd Max: 0.07326 Minimum: 0.019082

-- End Stats from CircularBuffer --

SNAPPdus.pl Average: 0.082242 Maximum: 0.258864 Minimum: 0.000017

Variance: 0.002765 Std Dev: 0.052585

SNAPTimes.pl s223t3l.dat

Sel-J Tss avg.:

0.00098135458186975641

Sel-J Tns avg.:

0.00088822710187154896

Sel-J Tnr avg.:

0.002960091633481007

Sel-J Trs avg.:

0.00040099402406439371

Sel-J NIU avg.:

0.0038483187353525561

Sel-J Nius avg.:

0.00088822710187154896

Sel-J Niur avg.:

0.002960091633481007

Sel-J Tgs avg.:

0.00097998007964430946

Sel-J Tgr avg.:

0.00068261155365146253

DCUAccuracy j14may.021.dat.g

g14may.021.dat.ownship Average: 25.750027456904 Stdev: 12.891917228699 Max: 51.836357116699 Min: 12.327514648438

DCUAccuracyLite j14may.021.dat.g g14may.021.dat.ownship 37.0

Average: 12.771357977977
Stdev: 0.356223136187
Max: 16.427181243896
Min: 12.327514648438

DCUAccuracy g14may.021.dat.j

j14may.021.dat.ownship Average: 32.463901958891 Stdev: 19.180244445801 Max: 64.800994873047 Min: 12.684135437012

DCUAccuracyLite g14may.021.dat.j j14may.021.dat.ownship 37.0

Average: 13.116742223990

Stdev: 0.265466511250 Max: 13.762958526611 Min: 12.684135437012

SNAPAccuracy

../DCU/j14may.021.dat.1j

s223t3l.dat.digi1J

Average: 0.012096774194 Stdev: 0.269136250019 Max: 6.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/j14may.021.dat.2j

s223t3l.dat.digi2J

Average: 5.915322580645 Stdev: 0.707738816738 Max: 6.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/j14may.021.dat.3j

s223t3l.dat.digi3J

Average: 13.406970696497 Stdev : 2.665643930435 Max : 16.838010787964 Min : 9.170519828796

SNAPAccuracy

../DCU/j14may.021.dat.1g

s223t3l.dat.digi1G

Average: 11.845425463304 Stdev: 6.072032451630 Max: 24.000000000000 Min: 5.515999794006

SNAPAccuracy

../DCU/j14may.021.dat.2g

s223t3l.dat.digi2G

Average: 11.857620585256 Stdev: 6.090378284454 Max: 24.000000000000 Min: 5.515999794006

SNAPAccuracy

../DCU/j14may.021.dat.3g

s223t3l.dat.digi3G

Average: 20.237317798583 Stdev: 4.285820007324 Max: 66.740303039551 Min: 13.295889854431

SNAPAccuracy

../DCU/g14may.021.dat.1j

s223t3l.dat.digi1J

Average: 14.928725864534 Stdev: 8.944581031799 Max: 24.008001327515 Min: 5.708000183105 **SNAPAccuracy**

../DCU/g14may.021.dat.2j

s223t3l.dat.digi2J

Average:

14.928725864534

Stdev: 8.944581031799 Max: 24.008001327515

Min : 5.708000183105

SNAPAccuracy

../DCU/g14may.021.dat.3j

s223t3l.dat.digi3J

average:

20.329523392188

Stdev: 4.041326522827 Max: 66.740303039551 Min: 12.960615158081

SNAPAccuracy

../DCU/g14may.021.dat.1g

s223t3l.dat.digi1G

Average: 5.782258064516 Stdev: 1.122069597244 Max: 6.000000000000

Min : 0.000000000000

SNAPAccuracy

../DCU/g14may.021.dat.2g

s223t3l.dat.digi2G

SNAPAccuracy

../DCU/g14may.021.dat.3g

s223t3l.dat.digi3G

Average:

13.406968897039

Stdev: 2.665646076202 Max: 16.838010787964 Min: 9.170610427856

7.2.22 Stats.022

/sg16/usr1/nets/GATEWA Y/gateway_lite2.stats

Frames: 494

Average: 0.0028244 Maximum: 0.011765 2nd Max: 0.005042 Minimum: 0.001483

/sg16/usr1/nets/GATEWA Y/gateway_lite1.stats Frames: 491

Average: 0.00297528 Maximum: 0.012655 2nd Max: 0.005239 Minimum: 0.001285

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 928 Count: 721 Average: 1869.85 Maximum: 3378.38 2nd Max: 3378.38

Minimum: -232.126

Frames: 170850 Average: 0.000210871 Maximum: 0.010396 2nd Max: 0.010198 Minimum: 9.3e-05

PDUs from Net1: 928 PDUs from Net2: 928

PDU Buffer 1

- Stats from CircularBuffer --

NumPass: 928 Average: 0.0449698 Variance: 0.00010515 Maximum: 0.07593 2nd Max: 0.073755 Minimum: 0.009788

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 928 Average: 0.0447214 Variance: 9.70437e-05 Maximum: 0.072667 2nd Max: 0.072271 Minimum: 0.015127

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.054548 Maximum: 0.208950 Minimum: 0.000012 Variance: 0.001303 Std Dev: 0.036091

SNAPTimes.pl s233t3l.dat

Sel-J Tss avg.:

0.00097818924329777903

Sel-J Tns avg.:

0.00088822710187154896

Sel-J Tnr avg.:

0.002960091633481007

Sel-J Trs avg.:

0.00060715338660369766

Sel-J NIU avg.:

0.0038483187353525561

Sel-J Nius avg.:

0.00088822710187154896

Sel-J Niur avg.:

0.002960091633481007

Sel-J Tgs avg.:

0.001394476095731398

Sel-J Tgr avg.:

0.00093575896428219887

DCUAccuracy j14may.022.dat.g g14may.022.dat.ownship Average: 33.278636519919 Stdev: 19.512884140015 Max: 90.789398193359 Min: 12.495001792908

DCUAccuracyLite j14may.022.dat.g

q14may.022.dat.ownship Average: 12.891096746657 Stdev: 0.259575575590 Max : 14.548254013062 Min : 12.495001792908

DCUAccuracy g14may.022.dat.i

j14may.022.dat.ownship Average: 33.492637050806 Stdev: 19.399761199951 Max: 90.789398193359 Min : 12.802011489868

DCUAccuracyLite g14may.022.dat.j

i14may.022.dat.ownship Average: 13.224056371053 Stdev: 0.279994696379 Max: 14.933873176575 Min: 12.802011489868

SNAPAccuracy

../DCU/j14may.022.dat.1j

s233t3l.dat.digi1J

Average: 0.012195121951 Stdev: 0.270225852728 Max : 6.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/j14may.022.dat.2j

s233t3l.dat.digi2J

Average: 13.441219830950 Stdev: 2.649139404297 Max: 16.838010787964 Min : 9.218936920166

SNAPAccuracy

../DCU/j14may.022.dat.3j

s233t3l.dat.digi3J

Average: 13.441252667647

Stdev: 2.649170398712 Max: 16.838010787964

Min: 9.218936920166

SNAPAccuracy

../DCU/j14may.022.dat.1g

s233t3l.dat.digi1G

Average:

25.597814729315

Stdev: 9.372941017151 Max : 96.000000000000

Min : 23.388000488281

SNAPAccuracy

../DCU/j14may.022.dat.2g

s233t3l.dat.digi2G

Average:

20.353343193575

Stdev: 4.488229274750 Max: 83.410537719727 Min: 13.160223007202

SNAPAccuracy

../DCU/j14may.022.dat.3g

s233t3l.dat.digi3G

Average:

20.385616191919

Stdev: 4.272136688232 Max: 83.410537719727 Min : 13.333000183105

SNAPAccuracy

../DCU/g14may.022.dat.1j

s233t3l.dat.digi1J

Average:

25.579787788244

Stdev: 9.434943199158 Max : 96.000000000000 Min : 6.907030105591

SNAPAccuracy

../DCU/g14may.022.dat.2j

s233t3l.dat.digi2J

Average:

20.573327733863

Stdev: 4.233132362366 Max: 83.410537719727 Min: 13.348984718323

SNAPAccuracy

../DCU/g14may.022.dat.3j

s233t3l.dat.digi3J

Average:

20.435987269292

Stdev: 3.115548133850 Max : 54.317455291748

Min: 13.331826210022

SNAPAccuracy

../DCU/g14may.022.dat.1g

s233t3l.dat.digi1G

Average: 5.804878048780 Stdev: 1.064264535904 Max : 6.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/q14may.022.dat.2q

s233t3l.dat.digi2G

Average: 13.441250511682 Stdev: 2.649172067642 Max: 16.838010787964 Min: 9.218936920166

SNAPAccuracy

../DCU/g14may.022.dat.3g

s233t3l.dat.digi3G

Average: 13.441250853529 Stdev: 2.649172544479 Max: 16.838010787964 Min: 9.218936920166

7.2.23 Stats.023

/sg16/usr1/nets/GATEWAY/gateway_lit

e2.stats

Frames: 495

Average: 0.00354299 Maximum: 0.011271 2nd Max: 0.004152 Minimum: 0.001285

/sg16/usr1/nets/GATEWAY/gateway_lit

e1.stats

Frames: 495

Average: 0.00383725 Maximum: 0.014449 2nd Max: 0.010975 Minimum: 0.001186

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 1378 Count: 977 Average: 1968.87 Maximum: 22727.3 2nd Max: 3378.38 Minimum: -638.978

Frames: 159338 Average: 0.000223888 Maximum: 0.011286 2nd Max: 0.010594 Minimum: 8.9e-05

PDUs from Net1: 1382 PDUs from Net2: 1379

PDU Buffer 1

-- Stats from CircularBuffer --NumPass: 1382 Average: 0.0455026 Variance: 0.000117842

Maximum: 0.079884 2nd Max: 0.072879 Minimum: 0.014831

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 1379 Average: 0.0458974 Variance: 0.000110524 Maximum: 0.075633 2nd Max: 0.070393 Minimum: 0.013347

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.053268 Maximum: 0.189906 Minimum: 0.000017 Variance: 0.000682 Std Dev: 0.026115

SNAPTimes.pl s243t3l.dat

Sel-J Tss avg.:

0.0009770258963483745

Sel-J Tns avg.:

0.00088822710187154896

Sel-J Tnr avg.:

0.002960091633481007

Sel-J Trs avg.:

0.00040059561764198054

Sel-J NIU avg.:

0.0038483187353525561

Sel-J Nius avg.:

0.00088822710187154896

Sel-J Niur avg.:

0.002960091633481007

Sel-J Tgs avg.:

0.0019452490041911811

Sel-J Tgr avg.:

0.0012760159364285548

DCUAccuracy j14may.023.dat.g g14may.023.dat.ownship Average: 32.490875638899 Stdev: 19.229503631592

Max : 51.986450195312 Min : 12.778741836548

DCUAccuracyLite j14may.023.dat.g

g14may.023.dat.ownship

Average:

13.025020654765

Stdev: 0.137376040220 Max : 13.310237884521 Min : 12.778741836548

DCUAccuracy g14may.023.dat.i j14may.023.dat.ownship

Average:

32.760340299763

Stdev: 19.073888778687 Max : 64.842208862305 Min: 13.106413841248

DCUAccuracyLite g14may.023.dat.i

j14may.023.dat.ownship

Average:

13.382456604640

Stdev: 0.133840739727 Max : 13.643105506897 Min: 13.106413841248

SNAPAccuracy

../DCU/j14may.023.dat.1i

s243t3l.dat.digi1J

Average: 0.108085721503 Stdev: 1.209594368935 Max : 16.670299530029 Min : 0.00000000000

SNAPAccuracy

../DCU/j14may.023.dat.2j s243t3l.dat.digi2J

Average:

13.425954358398

Stdev: 2.651851654053 Max : 16.838010787964 Min: 9.214953422546

SNAPAccuracy

../DCU/i14mav.023.dat.3i s243t3l.dat.digi3J

Average:

13.425987195095

Stdev: 2.651883125305 Max: 16.838010787964 Min : 9.214953422546

SNAPAccuracy

../DCU/j14may.023.dat.1g

s243t3l.dat.digi1G

Average:

19.999074056653

Stdev: 4.229197978973 Max : 66.740303039551

Min : 12.104727745056

SNAPAccuracy

../DCU/j14may.023.dat.2g

s243t3l.dat.digi2G

Average: 20.058885143523 Stdev: 4.166466236115 Max : 67.802452087402 Min : 13.221461296082

SNAPAccuracy

../DCU/j14may.023.dat.3g

s243t3l.dat.digi3G

Average: 20.278844604257 Stdev: 4.136075973511 Max : 66.740303039551 Min: 12.145759582520

SNAPAccuracy

../DCU/g14may.023.dat.1j

s243t3l.dat.digi1J

Average: 20.552482483817 Stdev: 4.813745498657 Max: 83.440536499023 Min : 13.547808647156

SNAPAccuracy

../DCU/q14mav.023.dat.2i

s243t3l.dat.digi2J

Average: 20.484243889324 Stdev: 4.533658504486 Max: 83.440536499023 Min : 13.547432899475

SNAPAccuracy

../DCU/q14may.023.dat.3i

s243t3l.dat.digi3J

Average: 20.308453374222 Stdev: 3.356575727463 Max : 54.281127929688 Min: 13.270554542542

SNAPAccuracy

../DCU/g14may.023.dat.1g

s243t3l.dat.digi1G

Average: 13.432628775031 Stdev: 2.653284072876 Max : 16.838010787964 Min : 9.214911460876

SNAPAccuracy

../DCU/g14may.023.dat.2g

s243t3l.dat.digi2G

Average: 13.432660391660 Stdev: 2.653314828873 Max : 16.838010787964 Min : 9.214911460876

SNAPAccuracy

../DCU/g14may.023.dat.3g

s243t3l.dat.digi3G

Average: 13.432660732812 Stdev: 2.653315305710 Max: 16.838010787964 Min: 9.214911460876

7.2.24 Stats.024

/usr1/figd/DIS2.2/dis4.stats

Frames: 502

Average: 0.000988976 Maximum: 0.006328 2nd Max: 0.006229 Minimum: 0.000692

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00115052 Maximum: 0.007909 2nd Max: 0.006327 Minimum: 0.000692

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 503

Average: 0.000673197 Maximum: 0.011369 2nd Max: 0.00346 Minimum: 0.000395

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 502

Average: 0.000620514 Maximum: 0.01305 2nd Max: 0.003065 Minimum: 0.000198

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 32 Count: 28 Average: 1961.56 Maximum: 3355.7 2nd Max: 2531.65 Minimum: 1264.22

Frames: 264790 Average: 0.000230251 Maximum: 0.010297 2nd Max: 0.010198 Minimum: 9.5e-05

PDUs from Net1: 26 PDUs from Net2: 32

PDU Buffer 1
-- Stats from
CircularBuffer -NumPass: 26

Average: 0.0434936 Variance: 0.000141045 Maximum: 0.069108 2nd Max: 0.040238 Minimum: 0.014039 -- End Stats from

PDU Buffer 2

CircularBuffer --

-- Stats from

CircularBuffer ---

NumPass: 32

Average: 0.0465288
Variance: 7.30101e-05
Maximum: 0.061988
2nd Max: 0.061396
Minimum: 0.02788
-- End Stats from
CircularBuffer --

SNAPPdus.pl

Average: 0.086679 Maximum: 0.121879 Minimum: 0.050804 Variance: 0.000250 Std Dev: 0.015811

SNAPTimes.pl s212t3.dat

Sel-J Tss avg.:

0.00097763021863074909

Sel-J Tns avg.:

0.00041731411504265748

Sel-J Tnr avg.:

0.00058340357846712828

Sel-J Trs avg.:

0.00042028031816472767

Sel-J NIU avg.:

0.0010909165011727664

Sel-J Nius avg.:

0.00041731411504265748

Sel-J Niur avg.:

0.00058340357846712828

Sel-J Tgs avg.: -

0.00027300596414698625

Sel-J Tgr avg.:

0.00031740954244730598

DCUAccuracy j14may.024.dat.g

g14may.024.dat.ownship

Average:

12.284501110504

Stdev: 2.049261808395 Max: 19.269805908203 Min: 0.165096938610 DCUAccuracy g14may.024.dat.j

j14may.024.dat.ownship Average: 12.649163227769 Stdev: 1.969825029373 Max: 19.589942932129 Min: 0.361997246742

SNAPAccuracy

../DCU/j14may.024.dat.1j

s212t3.dat.digi1J

Average: 5.794449136142 Stdev: 0.214674174786 Max: 8.805999755859 Min: 2.841000080109

SNAPAccuracy

../DCU/j14may.024.dat.2j

s212t3.dat.digi2J

Average: 6.128837468012 Stdev: 0.342441856861 Max: 9.131999969482 Min: 0.177900001407

SNAPAccuracy

../DCU/j14may.024.dat.3j

s212t3.dat.digi3J

Average: 6.454950289500 Stdev: 0.342474877834 Max: 9.458999633789 Min: 0.504200041294

SNAPAccuracy

../DCU/j14may.024.dat.1g

s212t3.dat.digi1G

Average: 5.721127032735 Stdev: 0.580399930477 Max: 8.805999755859 Min: 0.289999991655

SNAPAccuracy

../DCU/j14may.024.dat.2g

s212t3.dat.digi2G

Average: 6.059356262354 Stdev: 0.637257158756 Max: 9.131999969482 Min: 0.014999999665

SNAPAccuracy

../DCU/j14may.024.dat.3g

s212t3.dat.digi3G

Average: 6.385436766924 Stdev: 0.637238681316 Max: 9.458999633789 Min: 0.342000007629

SNAPAccuracy

../DCU/g14may.024.dat.1j

s212t3.dat.digi1J

Average: 5.765317270903 Stdev: 0.670191764832 Max: 6.027500152588 Min: 0.210000008345

SNAPAccuracy

../DCU/g14may.024.dat.2j

s212t3.dat.digi2J

Average: 6.089726132122 Stdev: 0.773474752903 Max: 6.383599758148 Min: 0.061999998987

SNAPAccuracy

../DCU/g14may.024.dat.3j

s212t3.dat.digi3J

Average: 6.382213720764 Stdev: 0.930844426155 Max: 6.713349819183 Min: 0.421999990940

SNAPAccuracy

../DCU/g14may.024.dat.1g

s212t3.dat.digi1G

Average: 5.852243976247 Stdev: 0.277521610260 Max: 6.054999828339 Min: 2.822999954224

SNAPAccuracy

../DCU/g14may.024.dat.2g

s212t3.dat.digi2G

Average: 6.186643494533 Stdev: 0.385762363672 Max: 6.386960029602 Min: 0.236900001764

SNAPAccuracy

../DCU/g14may.024.dat.3g

s212t3.dat.digi3G

Average: 6.512763204954 Stdev: 0.385756224394 Max: 6.713349819183 Min: 0.563399970531

7.2.25 Stats.025

/usr1/figd/DIS2.2/dis4.stats

Frames: 502

Average: 0.00143356 Maximum: 0.006129 2nd Max: 0.001482 Minimum: 0.000692

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 501

Average: 0.00141534 Maximum: 0.006327 2nd Max: 0.001483 Minimum: 0.000692

RateErr: 0

/sg16/usr1/nets/GATEWA

Y/gateway1.stats Frames : 501

Average: 0.00218693 Maximum: 0.011172 2nd Max: 0.003658 Minimum: 0.000395

/sg16/usr1/nets/GATEWA

Y/gateway2.stats Frames : 502

Average: 0.00221879 Maximum: 0.010083 2nd Max: 0.003263 Minimum: 0.000296

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs: 473 Count: 460 Average: 1620.83 Maximum: 3367 2nd Max: 2531.65 Minimum: -3246.75

Frames: 238184 Average: 0.000233521 Maximum: 0.01127 2nd Max: 0.010297 Minimum: 9.5e-05

PDUs from Net1: 473 PDUs from Net2: 473

PDU Buffer 1
-- Stats from
CircularBuffer -NumPass: 473
Average: 0.0448545
Variance: 9.9739e-05
Maximum: 0.074545
2nd Max: 0.074249
Minimum: 0.0175
-- End Stats from
CircularBuffer --

PDU Buffer 2
-- Stats from
CircularBuffer -NumPass: 473
Average: 0.0450356

Variance: 0.00010257

Maximum: 0.081663 2nd Max: 0.072864 Minimum: 0.019787

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.095616 Maximum: 1.315743 Minimum: 0.024224 Variance: 0.006628 Std Dev: 0.081415

SNAPTimes.pl s222t3.dat

Sel-J Tss avg.:

0.00097764143424592829

Sel-J Tns avg.:

0.00037109760939866209

Sel-J Tnr avg.:

0.00093820318724613166

Sel-J Trs avg.:

0.00057800398430248089

Sel-J NIU avg.:

0.0013431812748099599

Sel-J Nius avg.:

0.00037109760939866209

Sel-J Niur avg.:

0.00093820318724613166

Sel-J Tgs avg.:

0.00054471513923847554

Sel-J Tgr avg.:

0.001019061753064611

DCUAccuracy j14may.025.dat.g g14may.025.dat.ownship

Average: 12.435589099480 Stdev : 1.259754419327 Max : 13.665648460388 Min : 0.231049776077

DCUAccuracy g14may.025.dat.j

j14may.025.dat.ownship Average: 12.806711141005 Stdev: 1.170078992844 Max: 13.960242271423 Min: 0.113137081265

SNAPAccuracy

../DCU/j14may.025.dat.1j

s222t3.dat.digi1J

Average: 5.775044171383 Stdev: 0.267900824547 Max: 5.958000183105 Min: 0.268700003624

SNAPAccuracy

../DCU/j14may.025.dat.2j

s222t3.dat.digi2J

Average: 6.097932896118 Stdev: 0.291655331850 Max : 6.313000202179 Min : 0.028100000694

SNAPAccuracy

../DCU/j14may.025.dat.3j

s222t3.dat.digi3J

Average: 15.008247099172 Stdev: 2.495011806488 Max: 18.860408782959 Min: 8.896577835083

SNAPAccuracy

../DCU/j14may.025.dat.1g

s222t3.dat.digi1G

Average: 5.757298573085 Stdev: 0.107613474131 Max: 5.938199996948 Min: 5.531000137329

SNAPAccuracy

../DCU/j14may.025.dat.2g

s222t3.dat.digi2G

Average: 6.092463163229 Stdev: 0.114629253745 Max: 6.290999889374 Min: 5.856999874115

SNAPAccuracy

../DCU/j14may.025.dat.3g

s222t3.dat.digi3G

Average: 27.107625485434 Stdev: 4.028404235840 Max: 39.745262145996 Min: 16.509204864502

SNAPAccuracy

../DCU/g14may.025.dat.1j

s222t3.dat.digi1J

Average: 5.839202283115 Stdev: 0.107525914907 Max: 6.005000114441 Min: 5.611999988556

SNAPAccuracy

../DCU/g14may.025.dat.2j

s222t3.dat.digi2J

Average: 6.137916484207 Stdev: 0.554080545902 Max: 6.361000061035 Min: 0.104900002480

SNAPAccuracy

../DCU/g14may.025.dat.3j

s222t3.dat.digi3J

Average: 27.173633726020 Stdev: 3.866259336472 Max: 37.853050231934 Min: 16.568000793457 SNAPAccuracy

../DCU/g14may.025.dat.1g

s222t3.dat.digi1G

Average: 5.855735312045

Stdev: 0.275132179260 Max: 6.060750007629 Min: 0.179600000381

SNAPAccuracy

../DCU/g14may.025.dat.2g

s222t3.dat.digi2G

Average: 6.178968918126 Stdev: 0.291460961103 Max: 6.363999843597 Min: 0.117200002074

SNAPAccuracy

../DCU/g14may.025.dat.3g

s222t3.dat.digi3G

Average:

15.161578022978

Stdev: 2.538214445114 Max: 19.074804306030 Min: 8.874571800232

7.2.26 Stats.026

/usr1/figd/DIS2.2/dis4.stats

Frames: 502

Average: 0.00199179 Maximum: 0.012274 2nd Max: 0.009886 Minimum: 0.000692

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00186199 Maximum: 0.011779 2nd Max: 0.006328 Minimum: 0.000692

RateErr: 0

/sg16/usr1/nets/GATEWA

Y/gateway1.stats Frames: 503

Average: 0.00382022 Maximum: 0.018884 2nd Max: 0.012951 Minimum: 0.000396

/sg16/usr1/nets/GATEWA

Y/gateway2.stats Frames : 503

Average: 0.00380231 Maximum: 0.01829 2nd Max: 0.014039 Minimum: 0.000197

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 934 Count : 696 Average: 1673.76 Maximum: 6968.64 2nd Max: 3378.38 Minimum: -383.387

Frames: 211144 Average: 0.000238834 Maximum: 0.014039 2nd Max: 0.013941 Minimum: 9.5e-05

PDUs from Net1: 956 PDUs from Net2: 934

PDU Buffer 1

- Stats from CircularBuffer -

NumPass: 956 Average: 0.046279 Variance: 9.43459e-05 Maximum: 0.074941 2nd Max: 0.074051 Minimum: 0.020564

-- End Stats from CircularBuffer --

PDU Buffer 2

- Stats from CircularBuffer -

NumPass: 934 Average: 0.0463116 Variance: 9.391e-05 Maximum: 0.072272 2nd Max: 0.071382 Minimum: 0.007711

— End Stats from CircularBuffer —

SNAPPdus.pl

Average: 0.090968 Maximum: 0.865283 Minimum: 0.023632 Variance: 0.002164 Std Dev: 0.046523

SNAPTimes.pl s232t3.dat

Sel-J Tss avg.:

0.0010267729083432322

Sel-J Tns avg.:

0.00040127490037811952

Sel-J Tnr avg.:

0.001371177290947746

Sel-J Trs avg.:

0.00055400996000053312

Sel-J NIU avg.:

0.0018256215140187791

Sel-J Nius avg.:

0.00040127490037811952

Sel-J Niur avg.:

0.001371177290947746

Sel-J Tgs avg.:

0.0012375657371951701

Sel-J Tgr avg.:

0.0015261035852991804

DCUAccuracy j14may.026.dat.g

g14may.026.dat.ownship Average: 12.697332117722 Stdev: 1.857687354088 Max: 25.978088378906 Min: 5.512865066528

DCUAccuracy g14may.026.dat.j

j14may.026.dat.ownship Average: 13.162756596190 Stdev: 0.873809397221 Max: 17.123598098755 Min: 12.422451019287

SNAPAccuracy

../DCU/j14may.026.dat.1j

s232t3.dat.digi1J

Average: 5.838369743205 Stdev: 0.864752531052 Max: 11.950099945068 Min: 1.398499965668

SNAPAccuracy

../DCU/j14may.026.dat.2j

s232t3.dat.digi2J

Average: 14.326194452328 Stdev: 3.338593482971 Max: 33.926212310791 Min: 6.369104862213

SNAPAccuracy

../DCU/j14may.026.dat.3j

s232t3.dat.digi3J

Average: 15.748344590247 Stdev: 3.343401670456 Max: 35.259136199951 Min: 7.151724815369

SNAPAccuracy

../DCU/j14may.026.dat.1g

s232t3.dat.digi1G

Average: 5.834828910075 Stdev: 0.867575585842 Max: 11.950099945068 Min: 1.398499965668

SNAPAccuracy

../DCU/j14may.026.dat.2g

s232t3.dat.digi2G

Average: 25.920269000868

Stdev: 4.001894474030

Max : 39.642406463623 Min : 15.919855117798

SNAPAccuracy

../DCU/j14may.026.dat.3g

s232t3.dat.digi3G

Average:

27.808727217884

Stdev: 4.102556705475 Max: 42.557880401611 Min: 16.866632461548

SNAPAccuracy

../DCU/g14may.026.dat.1j

s232t3.dat.digi1J

Average: 5.840838807592 Stdev : 0.107529133558 Max : 6.042759895325

Min : 5.639999866486

SNAPAccuracy

../DCU/g14may.026.dat.2j

s232t3.dat.digi2J

Average:

25.970020023369

Stdev: 4.033720970154 Max: 38.835597991943

Min : 17.513917922974

SNAPAccuracy

../DCU/g14may.026.dat.3j

s232t3.dat.digi3J

Average:

27.614505938398

Stdev: 3.953446865082 Max: 38.917186737061 Min: 18.639499664307

SNAPAccuracy

../DCU/g14may.026.dat.1g

s232t3.dat.digi1G

Average: 5.845891491988 Stdev: 0.108670949936 Max: 6.059000015259 Min: 5.639999866486

SNAPAccuracy

../DCU/g14may.026.dat.2g

s232t3.dat.digi2G

Average:

14.363719886457

Stdev: 2.648536443710 Max: 18.690172195435

Min: 9.339308738708

SNAPAccuracy

../DCU/g14may.026.dat.3g

s232t3.dat.digi3G

Average: 15.727898900897

Stdev: 2.695292949677 Max: 19.798679351807

Min : 10.015582084656

7.2.27 Stats.027

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.00218924 Maximum: 0.013643 2nd Max: 0.008008 Minimum: 0.000692

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00218018 Maximum: 0.013164 2nd Max: 0.007712 Minimum: 0.000693

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 503

Average: 0.0062508 Maximum: 0.024024 2nd Max: 0.023036 Minimum: 0.000296

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 502

Average: 0.00590426 Maximum: 0.029265 2nd Max: 0.025013 Minimum: 0.000297

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 1393 Count: 955 Average: 1681.4 Maximum: 3378.38 2nd Max: 3367 Minimum: -3246.75

Frames: 191994 Average: 0.000244694 Maximum: 0.013545 2nd Max: 0.013347 Minimum: 8.9e-05

PDUs from Net1: 1396

PDUs from Net2: 1395

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 1396 Average: 0.0456294 Variance: 0.000103041 Maximum: 0.080181 2nd Max: 0.079784 Minimum: 0.019081

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 1395 Average: 0.0462197 Variance: 9.76469e-05 Maximum: 0.075732 2nd Max: 0.074447 Minimum: 0.018192

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.094776 Maximum: 2.637991 Minimum: 0.000160 Variance: 0.008570 Std Dev: 0.092574

SNAPTimes.pl s242t3.dat

Sel-J Tss avg.:

0.00097959561737725499

Sel-J Tns avg.:

0.00034342828683046797

Sel-J Tnr avg.:

0.0017209940239095102

Sel-J Trs avg.:

0.00040610557757953436

Sel-J NIU avg.:

0.0020994621513256493

Sel-J Nius avg.:

0.00034342828683046797

Sel-J Niur avg.:

0.0017209940239095102

Sel-J Tgs_avg.:

0.0025124382471447288

Sel-J Tar ava.:

0.0012678824695542851

DCUAccuracy j14may.027.dat.g q14may.027.dat.ownship Average: 12.478359814831

Stdev: 1.170644521713 Max : 13.536448478699

Min : 1.943576574326

DCUAccuracy g14may.027.dat.j j14may.027.dat.ownship

Average: 12.785652488289

Stdev: 1.215238332748 Max : 14.133720397949

Min : 1.888304233551

SNAPAccuracy

../DCU/j14may.027.dat.1j

s242t3.dat.digi1J

Average:

14.140195150011

Stdev: 2.554815530777 Max : 18.291767120361

Min: 7.944975852966

SNAPAccuracy

../DCU/j14may.027.dat.2j

s242t3.dat.digi2J

Average:

15.198900788843

Stdev: 2.727438449860 Max : 19.314838409424

Min: 7.836734771729

SNAPAccuracy

../DCU/j14may.027.dat.3j

s242t3.dat.digi3J

Average:

16.100941788503

Stdev: 2.806681156158 Max : 20.310932159424

Min: 7.909290313721

SNAPAccuracy

../DCU/j14may.027.dat.1g

s242t3.dat.digi1G

Average:

26.207886361205

Stdev: 4.515656948090

Max: 40.267459869385

Min : 16.741804122925

SNAPAccuracy

../DCU/j14may.027.dat.2g

s242t3.dat.digi2G

Average:

27.224088645610

Stdev: 4.332377433777

Max : 40.972724914551

Min : 17.465742111206

SNAPAccuracy

../DCU/j14may.027.dat.3g

s242t3.dat.digi3G

Average:

28.010718335970

Stdev: 4.113141059875

Max : 42.284572601318

Min: 19.024637222290

SNAPAccuracy

../DCU/q14may.027.dat.1i

s242t3.dat.digi1J

Average: 26.439335905645

Stdev: 4.782022953033 Max: 46.187576293945

Min: 11.825804710388

SNAPAccuracy

../DCU/g14may.027.dat.2j

s242t3.dat.digi2J

Average: 27.095127780829

Stdev: 4.688733577728

Max: 46.232624053955

Min : 11.699474334717

SNAPAccuracy

../DCU/g14may.027.dat.3j

s242t3.dat.digi3J

Average: 28.262584576391

Stdev: 4.603691101074

Max : 42.307777404785

Min : 15.424272537231

SNAPAccuracy

../DCU/g14may.027.dat.1g

s242t3.dat.digi1G

Average: 14.315343293626

Stdev: 2.571900129318 Max: 18.503646850586

Min: 7.920626163483

SNAPAccuracy

../DCU/g14may.027.dat.2g

s242t3.dat.digi2G

Average: 15.368374053141

Stdev: 2.744435548782

Max: 19.458662033081

Min: 7.837799072266

SNAPAccuracy ../DCU/g14may.027.dat.3g

s242t3.dat.digi3G

Average: 16.234708747634

Stdev: 2.860335826874

Max : 20.532659530640

Min: 7.929116249084

7.2.28 Stats.028

/usr1/figd/DIS2.2/dis lite3.stats

Frames: 503

Average: 0.00107986

Maximum: 0.006229

2nd Max: 0.006129 Minimum: 0.000692 RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 503

Average: 0.00100934 Maximum: 0.00613 2nd Max: 0.001483 Minimum: 0.000692

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway_lit

e2.stats Frames: 503

Average: 0.000643726 Maximum: 0.011765 2nd Max: 0.003855 Minimum: 0.000297

/sg16/usr1/nets/GATEWAY/gateway_lit

e1.stats Frames : 503

Average: 0.000705493 Maximum: 0.012259 2nd Max: 0.004449 Minimum: 0.000296

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 20 Count: 17 Average: 1769.53 Maximum: 2538.07 2nd Max: 2531.65 Minimum: -217.179

Frames: 401988 Average: 0.00037877 Maximum: 60.0002 2nd Max: 0.010298 Minimum: 9.5e-05

PDUs from Net1: 16 PDUs from Net2: 20

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 16 Average: 0.0497493 Variance: 0.000164828 Maximum: 0.065251 2nd Max: 0.062385 Minimum: 0.027979

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 20 Average: 0.0506607 Variance: 0.000178108 Maximum: 0.06802 2nd Max: 0.041623 Minimum: 0.030748 -- End Stats from CircularBuffer --

SNAPPdus.pl Average: 0.159529 Maximum: 2.204404 Minimum: 0.063571 Variance: 0.139559 Std Dev: 0.373576

SNAPTimes.pl s212t3l.dat

Sel-J Tss avg.:

0.0009776739561911784

Sel-J Tns avg.:

0.00039213717665507553

Sel-J Tnr avg.:

0.00057141550688839576

Sel-J Trs avg.:

0.00055214512924164731

Sel-J NIU avg.:

0.0010258270374989456

Sel-J Nius avg.:

0.00039213717665507553

Sel-J Niur avg.:

0.00057141550688839576

0.0005/14155068 Sel-J Tgs avg.: -

0.00026460238542036518

Sel-J Tgr avg.:

0.00031745526826802538

DCUAccuracy j14may.028.dat.g

g14may.028.dat.ownship

Average:

39.538628655563

Stdev: 27.126983642578 Max: 90.802444458008 Min: 12.525811195374

DCUAccuracyLite j14may.028.dat.g

g14may.028.dat.ownship

Average:

12.745228081215

Stdev: 0.203746661544 Max: 13.599327087402 Min: 12.525811195374

DCUAccuracy g14may.028.dat.j j14may.028.dat.ownship Average:

51.640845731202

Stdev: 38.305278778076 Max: 90.951805114746 Min: 12.908437728882 DCUAccuracyLite g14may.028.dat.j

j14may.028.dat.ownship Average: 13.096924988104 Stdev: 0.201645836234 Max: 13.961745262146 Min: 12.908437728882

SNAPAccuracy

../DCU/j14may.028.dat.1j

s212t3l.dat.digi1J

Average: 8.798101415577 Stdev: 3.000589132309 Max: 12.027999877930 Min: 5.636000156403

SNAPAccuracy

../DCU/j14may.028.dat.2j

s212t3l.dat.digi2J

Average: 8.798101415577 Stdev: 3.000589132309 Max: 12.027999877930 Min: 5.636000156403

SNAPAccuracy

../DCU/j14may.028.dat.3j

s212t3l.dat.digi3J

Average: 8.798101415577 Stdev: 3.000589132309 Max: 12.027999877930 Min: 5.636000156403

SNAPAccuracy

../DCU/j14may.028.dat.1g

s212t3l.dat.digi1G

Average: 35.680035465387 Stdev: 5.995203018188 Max: 42.013999938965 Min: 29.624000549316

SNAPAccuracy

../DCU/j14may.028.dat.2g

s212t3l.dat.digi2G

Average: 42.841678452870 Stdev: 6.373574256897 Max: 96.000000000000 Min: 30.000000000000

SNAPAccuracyLite

../DCU/j14may.028.dat.2g s212t3l.dat.digi2G fix 50.0 Average: 41.761740617791 Stdev: 0.763317465782 Max: 42.013999938965 Min: 30.0000000000000

SNAPAccuracy

../DCU/j14may.028.dat.3g

s212t3l.dat.digi3G

Average: 35.680035465387

Stdev: 5.995203018188 Max: 42.013999938965 Min: 29.624000549316

SNAPAccuracy

../DCU/g14may.028.dat.1j

s212t3l.dat.digi1J

Average: 32.844989807625 Stdev: 2.994192361832 Max: 36.017398834229 Min: 29.625000000000

SNAPAccuracy

../DCU/g14may.028.dat.2j

s212t3l.dat.digi2J

Average: 38.760829577340 Stdev: 3.029197692871 Max: 42.061000823975 Min: 35.606998443604

SNAPAccuracy

../DCU/g14may.028.dat.3j

s212t3l.dat.digi3J

Average: 38.766441019570 Stdev: 3.029713869095 Max: 42.061000823975 Min: 35.606998443604

SNAPAccuracy

../DCU/g14may.028.dat.1g

s212t3l.dat.digi1G

Average: 8.787652925227 Stdev: 2.998656749725

Max : 12.015000343323 Min : 5.625000000000

SNAPAccuracy

../DCU/g14may.028.dat.2g

s212t3l.dat.digi2G

Average: 8.787652925227 Stdev: 2.998656749725 Max: 12.015000343323 Min: 5.625000000000

SNAPAccuracy

../DCU/g14may.028.dat.3g

s212t3l.dat.digi3G

Average: 8.787652925227 Stdev: 2.998656749725 Max: 12.015000343323 Min: 5.625000000000

7.2.29 Stats.029

/usr1/figd/DIS2.2/dis_lite3.stats

Frames: 503

Average: 0.00140501 Maximum: 0.011088 2nd Max: 0.006723 Minimum: 0.000791

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.

stats

Frames: 502

Average: 0.00127565 Maximum: 0.011286 2nd Max: 0.006723 Minimum: 0.000593

RateErr: 0

/sg16/usr1/nets/GATEWA

Y/gateway_lite2.stats

Frames: 502

Average: 0.00260619 Maximum: 0.011962 2nd Max: 0.004054 Minimum: 0.000297

/sg16/usr1/nets/GATEWA

Y/gateway_lite1.stats

Frames: 502

Average: 0.00256195 Maximum: 0.014647 2nd Max: 0.012853 Minimum: 0.000297

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs : 481 Count : 469 Average: 1565.43 Maximum: 3367 2nd Max: 2247.19 Minimum: -9259.26

Frames: 298086 Average: 0.000243009 Maximum: 0.011172 2nd Max: 0.010791 Minimum: 9.5e-05

PDUs from Net1: 479 PDUs from Net2: 481

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 479

Average: 0.0449726 Variance: 9.35342e-05 Maximum: 0.074051 2nd Max: 0.068515

Minimum: 0.012161

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 481 Average: 0.0449208 Variance: 0.000105467 Maximum: 0.074347 2nd Max: 0.066043 Minimum: 0.014435

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.099340 Maximum: 1.741420 Minimum: 0.000002 Variance: 0.008937 Std Dev: 0.094533

SNAPTimes.pl s222t3l.dat

Sel-J Tss avg.:

0.00099559960149616321

Sel-J Tns avg.:

0.00044570916341116792

Sel-J Tnr avg.:

0.00082420119498596638

Sel-J Trs avg.:

0.00040448207153212393

Sel-J NIU avg.:

0.0013286254976134454

Sel-J Nius avg.:

0.00044570916341116792

Sel-J Niur avg.:

0.00082420119498596638

Sel-J Tgs avg.:

0.00073612151404033857

Sel-J Tgr avg.:

0.0011425039842453473

DCUAccuracy j14may.029.dat.g

g14may.029.dat.ownship Average: 45.394337101987 Stdev: 32.387050628662 Max: 77.939613342285 Min: 11.415390968323

DCUAccuracyLite j14may.029.dat.g

g14may.029.dat.ownship Average: 12.744813288475 Stdev: 0.204777911305 Max: 13.544171333313 Min: 11.415390968323

DCUAccuracy g14may.029.dat.j

j14may.029.dat.ownship Average: 51.359153264930 Stdev: 38.335643768311 Max: 90.995048522949 Min: 12.507913589478 DCUAccuracyLite g14may.029.dat.j

j14may.029.dat.ownship Average: 13.091949393392 Stdev: 0.186736047268 Max: 13.915553092957 Min: 12.507913589478

SNAPAccuracy

../DCU/j14may.029.dat.1j s222t3l.dat.digi1J

Average: 5.807758754408 Stdev: 0.111379593611 Max: 6.019200325012 Min: 5.248800277710

SNAPAccuracy

../DCU/j14may.029.dat.2j

s222t3l.dat.digi2J

Average: 5.807758754408 Stdev: 0.111379593611 Max: 6.019200325012 Min: 5.248800277710

SNAPAccuracy

../DCU/j14may.029.dat.3j s222t3l.dat.digi3J

Average: 14.867779303844 Stdev : 2.478090047836 Max : 26.745962142944 Min : 9.432236671448

SNAPAccuracy

../DCU/j14may.029.dat.1g s222t3l.dat.digi1G

Average: 32.865823320153 Stdev: 2.991808414459 Max: 36.034801483154 Min: 29.632999420166

SNAPAccuracy

../DCU/j14may.029.dat.2g s222t3l.dat.digi2G

Average: 29.827624183639 Stdev: 0.110525488853 Max: 30.043498992920 Min: 29.273099899292

SNAPAccuracy

../DCU/j14may.029.dat.3g

s222t3l.dat.digi3G

Average: 27.424780090237 Stdev: 5.174687385559 Max: 83.440536499023 Min: 18.072103500366

ONADA saussaulita

SNAPAccuracyLite ../DCU/j14may.029.dat.3g s222t3l.dat.digi3G 80.0 Average:

27.198020286003

Stdev: 3.809267282486 Max: 38.569686889648 Min: 18.072103500366

SNAPAccuracy

../DCU/g14may.029.dat.1j

s222t3l.dat.digi1J

Average:

32.738676503602

Stdev: 2.986470460892 Max: 36.000000000000 Min: 29.600099563599

SNAPAccuracy

../DCU/g14may.029.dat.2j s222t3l.dat.digi2J

Average:

37.097964441352

Stdev: 7.323400974274
Max: 96.000000000000
Min: 35.588001251221

SNAPAccuracyLite

../DCU/g14may.029.dat.2j s222t3l.dat.digi2J 37.0

Average:

35.785123471861

Stdev: 0.105912961066 Max: 36.0000000000000 Min: 35.588001251221

SNAPAccuracy

../DCU/g14may.029.dat.3j

s222t3l.dat.digi3J

Average:

26.957034926484

Stdev: 4.814510345459 Max: 83.955986022949 Min: 15.739914894104

SNAPAccuracyLite

../DCU/g14may.029.dat.3j s222t3l.dat.digi3J 80.0

Average:

26.838779841221

Stdev: 4.058719158173 Max: 38.360717773438 Min: 15.739914894104

SNAPAccuracy

../DCU/g14may.029.dat.1g

s222t3l.dat.digi1G

Average: 5.828194171130 Stdev: 0.108327634633 Max: 6.043499946594 Min: 5.605199813843 **SNAPAccuracy**

../DCU/g14may.029.dat.2g

s222t3l.dat.digi2G

Average: 8.792948687340 Stdev: 3.000623464584 Max: 12.034999847412 Min: 5.605199813843

SNAPAccuracy

../DCU/g14may.029.dat.3g

s222t3l.dat.digi3G

Average: 15.222702707563 Stdev: 2.581191062927 Max: 26.745962142944 Min: 9.545629501343

7.2.30 Stats.030

/usr1/figd/DIS2.2/dis_lite3.stats

Frames: 501

Average: 0.00162842 Maximum: 0.012555 2nd Max: 0.006624 Minimum: 0.00089

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 500

Average: 0.00161944 Maximum: 0.009788 2nd Max: 0.007118 Minimum: 0.000691

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway lit

e2.stats Frames : 500

Average: 0.00423622 Maximum: 0.016412 2nd Max: 0.015423 Minimum: 0.000296

/sg16/usr1/nets/GATEWAY/gateway_lit

e1.stats Frames : 501

Average: 0.00440082 Maximum: 0.017302 2nd Max: 0.016214

Minimum: 0.000297

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 946 Count: 676 Average: 1752.56 Maximum: 3378.38 2nd Max: 3378.38 Minimum: -568.747

Frames: 224515 Average: 0.000238137 Maximum: 0.021157 2nd Max: 0.014929 Minimum: 9.5e-05

PDUs from Net1: 954 PDUs from Net2: 946

PDU Buffer 1

Stats from CircularBuffer -- NumPass: 954
Average: 0.0456306
Variance: 0.000100455
Maximum: 0.07583
2nd Max: 0.075633

Minimum: 0.017895
-- End Stats from CircularBuffer ---

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 946 Average: 0.0454419 Variance: 0.000131921 Maximum: 0.084643 2nd Max: 0.064263 Minimum: 0.011765

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.090073 Maximum: 1.304361 Minimum: 0.000004 Variance: 0.004773 Std Dev: 0.069084

SNAPTimes.pl s232t3l.dat

Sel-J Tss avg.:

0.00089697011934191664

Sel-J Tns avg.:

0.00037300000029251505

Sel-J Tnr avg.:

0.001078258964157268

Sel-J Trs avg.:

0.00059541832645000723

Sel-J NIU avg.:

0.0014853087649900982

Sel-J Nius avg.:

0.00037300000029251505

Sel-J Niur avg.:

0.001078258964157268

Sel-J Tgs_avg.:

0.0016478645423148013

Sel-J Tgr avg.:

0.0019558187241309351

DCUAccuracy j14may.030.dat.g g14may.030.dat.ownship

Average:

15.504729431168

Stdev: 12.919945716858 Max: 77.875045776367 Min: 3.056270360947

DCUAccuracyLite j14may.030.dat.g

g14may.030.dat.ownship

Average:

12.821004659443

Stdev: 2.891056299210 Max: 38.990539550781 Min: 3.056270360947

DCUAccuracy q14may.030.dat.i

j14may.030.dat.ownship

Average:

16.148398170658

Stdev: 14.380816459656 Max: 90.913955688477 Min: 0.020999999717

DCUAccuracyLite g14may.030.dat.j

j14may.030.dat.ownship

Average:

12.896409017355

Stdev: 1.304455399513 Max: 16.335792541504 Min: 0.020999999717

SNAPAccuracy

../DCU/j14may.030.dat.1j

s232t3l.dat.digi1J

Average: 5.774898000645 Stdev: 0.828844547272 Max: 11.906999588013 Min: 0.004000000190

SNAPAccuracy

../DCU/j14may.030.dat.2j

s232t3l.dat.digi2J

Average:

13.979462211869

Stdev: 3.049239635468 Max: 33.611030578613 Min: 6.836070060730

SNAPAccuracy

../DCU/j14may.030.dat.3j

s232t3l.dat.digi3J

Average:

15.614099385748

Stdev: 3.084318399429

Max : 35.345123291016 Min : 9.821558952332

SNAPAccuracy

../DCU/j14may.030.dat.1g

s232t3l.dat.digi1G

Average: 18.547373680933 Stdev: 14.796379089355 Max: 41.922901153564 Min: 4.246999740601

SNAPAccuracy

../DCU/j14may.030.dat.2g

s232t3l.dat.digi2G

Average: 25.807952249001 Stdev: 6.683676719666 Max: 84.397186279297 Min: 16.374053955078

SNAPAccuracyLite

../DCU/j14may.030.dat.2g s232t3l.dat.digi2G 50.0 Average: 25.228077852726 Stdev : 4.023607254028 Max : 39.859043121338

SNAPAccuracy

../DCU/j14may.030.dat.3g

Min : 16.374053955078

s232t3l.dat.digi3G

Average: 28.246872192973 Stdev: 8.162457466125 Max: 83.707717895508 Min: 18.420673370361

SNAPAccuracyLite

../DCU/j14may.030.dat.3g s232t3l.dat.digi3G 50.0 Average: 27.339489050287 Stdev: 4.143154621124 Max: 43.322616577148

SNAPAccuracy

../DCU/g14may.030.dat.1j

Min : 18.420673370361

s232t3l.dat.digi1J

Average: 16.005681595822 Stdev: 11.789810180664 Max: 30.009000778198 Min: 5.635000228882

SNAPAccuracy

../DCU/g14may.030.dat.2j

s232t3l.dat.digi2J

Average: 26.154642799393 Stdev: 8.002829551697 Max: 83.694519042969 Min: 16.482587814331 SNAPAccuracyLite ../DCU/g14may.030.dat.2j s232t3l.dat.digi2J 50.0 Average: 25.235989858108 Stdev: 3.602236747742

Max : 37.946060180664 Min : 16.482587814331

SNAPAccuracy

../DCU/g14may.030.dat.3j

s232t3l.dat.digi3J

Average: 27.428572460016 Stdev: 5.765800476074 Max: 86.836929321289 Min: 17.055908203125

SNAPAccuracyLite

../DCU/g14may.030.dat.3j s232t3l.dat.digi3J 50.0 Average: 27.018783853835 Stdev : 3.587842226028 Max : 38.255680084229 Min : 17.055908203125

SNAPAccuracy

../DCU/g14may.030.dat.1g

s232t3l.dat.digi1G

Average: 5.845945389874 Stdev: 0.101214185357 Max: 6.038000106812 Min: 5.635000228882

SNAPAccuracy

../DCU/g14may.030.dat.2g

s232t3l.dat.digi2G

Average: 14.202304692632 Stdev: 2.819746017456 Max: 26.870477676392 Min: 9.379276275635

SNAPAccuracy

../DCU/g14may.030.dat.3g

s232t3l.dat.digi3G

Average: 15.731646681406 Stdev : 2.777794122696 Max : 26.870477676392 Min : 9.812332153320

7.2.31 Stats.031

/usr1/figd/DIS2.2/dis_lite3.stats

Frames: 503

Average: 0.00181088 Maximum: 0.012471 2nd Max: 0.011384 Minimum: 0.000782 RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.

stats

Frames: 503

Average: 0.00175401 Maximum: 0.011186 2nd Max: 0.00603 Minimum: 0.000692

RateErr: 0

/sg16/usr1/nets/GATEWA

Y/gateway_lite2.stats

Frames: 503 Average: 0.0064538

Maximum: 0.030451 2nd Max: 0.017993 Minimum: 0.000197

/sg16/usr1/nets/GATEWA

Y/gateway_lite1.stats

Frames: 503

Average: 0.00659594 Maximum: 0.02175 2nd Max: 0.021355 Minimum: 0.000395

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs: 1412 Count: 922 Average: 1573.92 Maximum: 3367 2nd Max: 3367 Minimum: -111111

Frames: 214509 Average: 0.000241057 Maximum: 0.014039 2nd Max: 0.013742 Minimum: 9.5e-05

PDUs from Net1: 1403 PDUs from Net2: 1412

PDU Buffer 1
-- Stats from
CircularBuffer -NumPass: 1403
Average: 0.0460767
Variance: 0.000101837
Maximum: 0.085717
2nd Max: 0.085026
Minimum: 0.015523
-- End Stats from

PDU Buffer 2

CircularBuffer --

-- Stats from CircularBuffer --

NumPass: 1412 Average: 0.0461157 Variance: 0.000101656 Maximum: 0.079587 2nd Max: 0.071579 Minimum: 0.013544

-- End Stats from CircularBuffer --

SNAPPdus.pl Average: 0.097735 Maximum: 3.244259 Minimum: 0.003059

Variance: 0.012757 Std Dev: 0.112946

SNAPTimes.pl s242t3l.dat

Sel-J Tss avg.:

0.00099876095591608306

Sel-J Tns avg.:

0.00040471713137265621

Sel-J Tnr avg.:

0.001287816733062041

Sel-J Trs avg.:

0.00040097609549608689

Sel-J NIU avg.:

0.0017086593622635804

Sel-J Nius avg.:

0.00040471713137265621

Sel-J Niur avg.:

0.001287816733062041

Sel-J Tas ava.:

0.0025664940239006812

Sel-J Tgr avg.:

0.0017751633472308382

DCUAccuracy j14may.031.dat.g g14may.031.dat.ownship Average: 18.576134883968 Stdev: 18.716020584106

Max : 90.913299560547 Min : 0.209117189050

DCUAccuracyLite j14may.031.dat.g g14may.031.dat.ownship 70.0 Average: 12.758071825529 Stdev: 1.251543760300

Max : 25.552766799927 Min : 0.209117189050

DCUAccuracy g14may.031.dat.j j14may.031.dat.ownship Average: 17.513071249487 Stdev: 16.237827301025

Max : 77.825897216797 Min : 9.564558029175

DCUAccuracyLite g14may.031.dat.j j14may.031.dat.ownship 70.0

Average: 13.158452976181 Stdev: 1.202984094620 Max: 25.972347259521 Min: 9.564558029175

SNAPAccuracy

../DCU/j14may.031.dat.1j

s242t3l.dat.digi1J

Average: 14.164856139323 Stdev : 2.578699111938 Max : 30.655679702759 Min : 9.099686622620

SNAPAccuracy

../DCU/j14may.031.dat.2j

s242t3l.dat.digi2J

Average: 15.305056926950 Stdev: 2.640662431717 Max: 32.710716247559 Min: 10.101528167725

SNAPAccuracy

../DCU/j14may.031.dat.3j

s242t3l.dat.digi3J

Average: 16.146789149739 Stdev : 2.857686281204 Max : 33.688190460205 Min : 11.541846275330

SNAPAccuracy

../DCU/j14may.031.dat.1g

s242t3l.dat.digi1G

Average: 27.057103864986 Stdev: 8.102226257324 Max: 83.696517944336 Min: 16.162992477417

SNAPAccuracyLite

../DCU/j14may.031.dat.1g s242t3l.dat.digi1G 50.0 Average: 26.086610280397 Stdev: 4.007351875305 Max: 39.845664978027

SNAPAccuracy

../DCU/j14may.031.dat.2g

s242t3l.dat.digi2G

Average: 28.008454675811 Stdev: 7.769081592560 Max: 83.696517944336 Min: 16.758136749268

SNAPAccuracyLite

../DCU/j14may.031.dat.2g s242t3l.dat.digi2G 50.0 Average: 27.201486670625 Stdev : 3.967911720276 Max : 42.828765869141 Min : 16.758136749268 SNAPAccuracy

../DCU/j14may.031.dat.3g

s242t3l.dat.digi3G

Average:

28.896565321486

Stdev: 8.454629898071 Max: 83.787994384766

Min: 17.815122604370

SNAPAccuracyLite

../DCU/j14may.031.dat.3g s242t3l.dat.digi3G 50.0

Average:

27.881828815421

Stdev: 4.035892486572 Max: 41.286331176758

Min : 17.815122604370

SNAPAccuracy

../DCU/g14may.031.dat.1j

s242t3l.dat.digi1J

Average:

26.547343960367

Stdev: 5.350012779236 Max: 83.736152648926

Min : 16.106178283691

SNAPAccuracyLite

../DCU/g14may.031.dat.1j s242t3l.dat.digi1J 50.0

Average:

26.343035361346

Stdev: 4.296329498291 Max: 41.710067749023 Min: 16.106178283691

SNAPAccuracy

../DCU/g14may.031.dat.2j s242t3l.dat.diqi2J

s242t3l.dat.digi2 Average:

27.313774398963

Stdev: 4.010496139526 Max: 41.813247680664 Min: 16.378652572632

SNAPAccuracy

../DCU/g14may.031.dat.3j s242t3l.dat.digi3J

Average:

28.120401115656

Stdev: 5.251849651337 Max: 83.736152648926 Min: 19.405469894409

SNAPAccuracyLite

../DCU/g14may.031.dat.3j s242t3l.dat.digi3J 50.0 Average: 27.894987446207 Stdev: 3.938760757446 Max: 41.913909912109 Min: 19.405469894409

SNAPAccuracy

../DCU/g14may.031.dat.1g

s242t3l.dat.digi1G

Average: 14.343544750866 Stdev: 2.691408634186 Max: 31.041625976562 Min: 9.224370002747

SNAPAccuracy

../DCU/g14may.031.dat.2g

s242t3l.dat.digi2G

Average: 15.478609334535 Stdev: 2.770312547684 Max: 33.051311492920 Min: 10.189666748047

SNAPAccuracy

../DCU/g14may.031.dat.3g

s242t3l.dat.digi3G

Average: 16.318760096667 Stdev: 2.982353448868 Max: 33.967319488525 Min: 11.609789848328

7.3 15 May 97 Data

7.3.1 Stats.001

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.00105508 Maximum: 0.006426 2nd Max: 0.001187 Minimum: 0.000387

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00110736 Maximum: 0.00692 2nd Max: 0.001286 Minimum: 0.000387

RateErr: 0

PDUs : 28

/sg16/usr1/nets/DISNET/disnet7.stats

Count: 28 Average: 1996.69 Maximum: 3367 2nd Max: 2531.65 Minimum: 919.118

Frames: 306395 Average: 0.000207852 Maximum: 0.010297 2nd Max: 0.010198 Minimum: 8.9e-05

PDUs from Net1: 16 PDUs from Net2: 28

PDU Buffer 1

-- Stats from CircularBuffer --NumPass: 16

Average: 0.0453177 Variance: 7.70725e-05 Maximum: 0.062582 2nd Max: 0.062187 Minimum: 0.032625

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 28 Average: 0.0432328 Variance: 0.000105418 Maximum: 0.064758 2nd Max: 0.062878

Minimum: 0.02699 -- End Stats from CircularBuffer ---

SNAPPdus.pl Average: 0.048162 Maximum: 0.069412 Minimum: 0.033015 Variance: 0.000097 Std Dev: 0.009838

SNAPTimes.pl Sel-J Tss avg.:

0.001340487077523247

Sel-J Tns avg.:

0.0003879622266503795

Sel-J Tnr avg.:

0.0006230596419855226

Sel-J Trs avg.:

0.00048395825053112042

Sel-J NIU avg.:

0.0010479920475946686

Sel-J Tgs avg.: 0 Sel-J Tgr avg.: 0

DCUAccuracy i15may.001.dat.q

g15may.001.dat.ownship

Average:

14.526470299690

Stdev: 0.992989242077 Max : 16.346832275391

Min : 12.788065910339

DCUAccuracy g15may.001.dat.j

j15may.001.dat.ownship

Average:

13.575931044299

Stdev: 0.310518503189 Max: 14.154398918152 Min : 13.040795326233

SNAPAccuracy

../DCU/j15may.001.dat.1j

e211t3.dat.digi1J

Comparing:

../DCU/j15may.001.dat.1j with e211t3.dat.digi1J Average: 5.730520925369

Stdev: 0.109280966222 Max : 5.967000007629

Min : 5.521999835968

SNAPAccuracy

../DCU/j15may.001.dat.2j

e211t3.dat.digi2J

Comparing: ../DCU/j15may.001.dat.2j

with e211t3.dat.digi2J Average: 6.057292670131 Stdev: 0.108867906034 Max : 6.267270088196 Min : 5.847000122070

SNAPAccuracy

../DCU/j15may.001.dat.3j

e211t3.dat.digi3J

Comparing: ../DCU/j15may.001.dat.3j

with e211t3.dat.digi3J Average: 6.411652204023 Stdev: 0.109245590866 Max : 6.649000167847 Min : 6.203999996185

SNAPAccuracy

../DCU/j15may.001.dat.1g

e211t3.dat.digi1G

Comparing: ../DCU/j15may.001.dat.1g

with e211t3.dat.digi1G Average: 5.727391172801 Stdev: 0.109005086124 Max : 5.967000007629 Min : 5.49399958038

SNAPAccuracy

../DCU/j15may.001.dat.2g

e211t3.dat.digi2G

Comparing: ../DCU/j15may.001.dat.2g

with e211t3.dat.digi2G Average: 6.083714130425 Stdev: 0.108975961804 Max : 6.322999954224 Min : 5.849999904633

SNAPAccuracy

../DCU/j15may.001.dat.3g

e211t3.dat.digi3G

Comparing: ../DCU/j15may.001.dat.3g

with e211t3.dat.digi3G Average: 6.428062145527 Stdev: 0.107021443546 Max : 6.649000167847 Min : 6.232000350952

SNAPAccuracy

../DCU/q15may.001.dat.1j

e211t3.dat.digi1J

Comparing: ../DCU/g15may.001.dat.1j

with e211t3.dat.digi1J Average: 5.818967338484 Stdev: 0.106516085565 Max : 6.043000221252 Min : 5.610000133514

../DCU/g15may.001.dat.2j

e211t3.dat.digi2J

Comparing: ../DCU/g15may.001.dat.2j

with e211t3.dat.digi2J Average: 6.115685712075 Stdev: 0.106515392661 Max: 6.339999675751 Min: 5.906000137329

SNAPAccuracy

../DCU/g15may.001.dat.3j

e211t3.dat.digi3J

Comparing: ../DCU/g15may.001.dat.3j

with e211t3.dat.digi3J Average: 6.481865975351 Stdev: 0.109201371670 Max: 6.724999904633 Min: 6.255000114441

SNAPAccuracy

../DCU/g15may.001.dat.1g

e211t3.dat.digi1G

Comparing: ../DCU/g15may.001.dat.1g

with e211t3.dat.digi1G Average: 5.803419274020 Stdev: 0.109860412776 Max: 6.043000221252 Min: 5.572999954224

SNAPAccuracy

../DCU/g15may.001.dat.2g

e211t3.dat.digi2G

Comparing: ../DCU/g15may.001.dat.2g

with e211t3.dat.digi2G Average: 6.159739251118 Stdev: 0.109817475080 Max: 6.399000167847 Min: 5.928999900818

SNAPAccuracy

../DCU/g15may.001.dat.3g

e211t3.dat.digi3G

Comparing: ../DCU/g15may.001.dat.3g

with e211t3.dat.digi3G Average: 6.484570154703 Stdev: 0.109886050224 Max: 6.724999904633 Min: 6.255000114441

7.3.2 Stats.002

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.00139593 Maximum: 0.007317 2nd Max: 0.001384 Minimum: 0.000593

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00160903 Maximum: 0.00791 2nd Max: 0.001087 Minimum: 0.000494

RateErr: 0

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs: 494 Count: 483 Average: 1994.03 Maximum: 3389.83 2nd Max: 3378.38 Minimum: -302.297

Frames: 243576 Average: 0.000453869

Maximum: 60 2nd Max: 0.010298 Minimum: 1.9e-05

PDUs from Net1: 484 PDUs from Net2: 494

PDU Buffer 1

-- Stats from
CircularBuffer -NumPass: 484
Average: 0.0456349
Variance: 0.000104206
Maximum: 0.0785
2nd Max: 0.053585
Minimum: 0.01048

-- End Stats from

CircularBuffer --

PDU Buffer 2
-- Stats from
CircularBuffer -NumPass: 494
Average: 0.0451301
Variance: 0.000101864
Maximum: 0.075138
2nd Max: 0.07405
Minimum: 0.015522
-- End Stats from

SNAPPdus.pl Average: 0.049332 Maximum: 0.084476

CircularBuffer ---

Minimum: 0.013358 Variance: 0.000104 Std Dev: 0.010217

SNAPTimes.pl

Sel-J Tss avg.:

0.0013461928427649641

Sel-J Tns avg.:

0.0003832962226423955

Sel-J Tnr avg.:

0.0011302027831670586

Sel-J Trs avg.:

0.0003060775347957554

Sel-J NIU avg.:

0.0015453061629307761

Sel-J Tgs avg.: 0 Sel-J Tgr avg.: 0

DCUAccuracy j15may.002.dat.g

g15may.002.dat.ownship Average: 14.239819555513 Stdev: 1.946671724319 Max: 21.947957992554 Min: 0.232693552971

DCUAccuracy g15may.002.dat.j

j15may.002.dat.ownship Average: 13.460712668366 Stdev: 1.587593555450 Max: 20.341011047363 Min: 0.131381124258

SNAPAccuracy

../DCU/j15may.002.dat.1j

e221t3.dat.digi1J

Comparing: ../DCU/j15may.002.dat.1j

with e221t3.dat.digi1J Average: 5.728082271723 Stdev: 0.226231828332 Max: 5.959000110626 Min: 2.628999948502

SNAPAccuracy

../DCU/j15may.002.dat.2j

e221t3.dat.digi2J

Comparing: ../DCU/j15may.002.dat.2j

with e221t3.dat.digi2J Average: 6.099453646644 Stdev: 0.224284395576 Max: 6.330999851227 Min: 3.015000104904

SNAPAccuracy

../DCU/j15may.002.dat.3j

e221t3.dat.digi3J

Comparing: ../DCU/j15may.002.dat.3j

with e221t3.dat.digi3J Average: 14.653271478197 Stdev: 2.926210880280 Max : 18.932235717773 Min : 9.380626678467

SNAPAccuracy

../DCU/j15may.002.dat.1g

e221t3.dat.digi1G

Comparing: ../DCU/j15may.002.dat.1g

with e221t3.dat.digi1G Average: 5.665983446155 Stdev: 0.608929812908 Max: 5.959000110626 Min: 0.074000000954

SNAPAccuracy

../DCU/j15may.002.dat.2g

e221t3.dat.digi2G

Comparing: ../DCU/j15may.002.dat.2g

with e221t3.dat.digi2G Average: 6.023270145392 Stdev: 0.676889836788 Max: 6.330999851227 Min: 0.265000015497

SNAPAccuracy

../DCU/j15may.002.dat.3g

e221t3.dat.digi3G

Comparing: ../DCU/j15may.002.dat.3g

with e221t3.dat.digi3G Average: 20.464463164167 Stdev: 3.111106157303 Max: 29.896411895752 Min: 11.163173675537

SNAPAccuracy

../DCU/g15may.002.dat.1j

e221t3.dat.digi1J

Comparing: ../DCU/g15may.002.dat.1j

with e221t3.dat.digi1J Average: 5.739741924829 Stdev: 0.668464303017 Max: 8.597000122070 Min: 0.002000000095

SNAPAccuracy

../DCU/g15may.002.dat.2j

e221t3.dat.digi2J

Comparing: ../DCU/g15may.002.dat.2j

with e221t3.dat.digi2J Average: 6.109851371368 Stdev: 0.672380268574 Max: 8.982000350952 Min: 0.342000007629

SNAPAccuracy

../DCU/g15may.002.dat.3j

e221t3.dat.digi3J

Comparing: ../DCU/g15may.002.dat.3j

with e221t3.dat.digi3J Average: 20.671783672116 Stdev: 3.135610342026 Max: 29.951704025269 Min: 9.978733062744

SNAPAccuracy

../DCU/g15may.002.dat.1g

e221t3.dat.digi1G

Comparing:

../DCU/g15may.002.dat.1g with e221t3.dat.digi1G Average: 5.814942117171 Stdev: 0.208095297217 Max: 8.597000122070

Min : 3.026000022888

SNAPAccuracy

../DCU/g15may.002.dat.2g e221t3.dat.digi2G

Comparing:

../DCU/g15may.002.dat.2g with e221t3.dat.digi2G Average: 6.174138993747

Stdev: 0.334098726511 Max: 8.982000350952 Min: 0.354000002146

SNAPAccuracy

../DCU/g15may.002.dat.3g

e221t3.dat.digi3G

Comparing:

../DCU/g15may.002.dat.3g with e221t3.dat.digi3G

Average:

14.913529721655

Stdev: 2.886618614197 Max: 21.587764739990 Min: 8.036425590515

7.3.3 Stats.03

/usr1/figd/DIS2.2/dis4.stats

Frames: 502

Average: 0.00174744 Maximum: 0.006525 2nd Max: 0.001483 Minimum: 0.00089

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 500 Average: 0.0019255 Maximum: 0.011483 2nd Max: 0.007514 Minimum: 0.000889 RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 939 Count: 897 Average: 2073.75 Maximum: 5050.51 2nd Max: 3401.36 Minimum: -664.011

Frames: 219189 Average: 0.000209053 Maximum: 0.01089 2nd Max: 0.010297 Minimum: 8.8e-05

PDUs from Net1: 935 PDUs from Net2: 939

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 935 Average: 0.0454275 Variance: 9.76532e-05 Maximum: 0.074842 2nd Max: 0.07189 Minimum: 0.013643

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 939 Average: 0.045239 Variance: 9.9745e-05 Maximum: 0.075138 2nd Max: 0.06891 Minimum: 0.015819

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.051213 Maximum: 0.812371 Minimum: 0.002943 Variance: 0.000425 Std Dev: 0.020623

SNAPTimes.pl Sel-J Tss ava.:

0.0013243419482573131

Sel-J Tns avg.:

0.00035274950290403365

Sel-J Tnr avg.:

0.0014149423460216885

Sel-J Trs avg.:

0.00040845924458213272

Sel-J NIU avg.:

0.0018219642146609938

Sel-J Tgs avg.: 0 Sel-J Tgr avg.: 0 DCUAccuracy j15may.003.dat.g g15may.003.dat.ownship Average: 14.511405666589 Stdev: 0.963613033295 Max: 16.197570800781 Min: 12.760227203369

DCUAccuracy g15may.003.dat.j j15may.003.dat.ownship Average: 13.556924193136 Stdev: 0.316394686699 Max: 14.154499053955 Min: 13.061047554016

SNAPAccuracy ../DCU/j15may.003.dat.1j e231t3.dat.digi1J

Comparing: ../DCU/j15may.003.dat.1j

with e231t3.dat.digi1J Average: 5.754130598525 Stdev: 0.108093626797 Max: 5.970580101013 Min: 5.544000148773

SNAPAccuracy ../DCU/j15may.003.dat.2j e231t3.dat.digi2J

Comparing: ../DCU/j15may.003.dat.2j

with e231t3.dat.digi2J Average: 13.539687586502 Stdev: 2.722505569458 Max: 17.684467315674 Min: 9.181105613708

SNAPAccuracy ../DCU/j15may.003.dat.3j e231t3.dat.digi3J

Comparing: ../DCU/j15may.003.dat.3j

with e231t3.dat.digi3J Average: 15.446123798608 Stdev : 2.633305072784 Max : 19.587667465210 Min : 9.961161613464

SNAPAccuracy ../DCU/j15may.003.dat.1g e231t3.dat.digi1G

Comparing: ../DCU/i15may.003.dat.1g

with e231t3.dat.digi1G Average: 5.753102462800 Stdev: 0.105702891946 Max: 5.941999912262 Min: 5.559999942780

SNAPAccuracy ../DCU/j15may.003.dat.2g e231t3.dat.digi2G Comparing:

../DCU/j15may.003.dat.2g with e231t3.dat.digi2G

Average:

19.573718576779

Stdev: 2.719421386719 Max: 29.813547134399 Min: 13.107870101929

SNAPAccuracy

../DCU/j15may.003.dat.3g

e231t3.dat.digi3G

Comparing:

../DCU/j15may.003.dat.3g with e231t3.dat.digi3G

Average:

21.152152009233

Stdev: 2.904633760452 Max: 30.067607879639 Min: 13.839692115784

SNAPAccuracy

../DCU/g15may.003.dat.1j

e231t3.dat.digi1J Comparing:

../DCU/g15may.003.dat.1j with e231t3.dat.digi1J Average: 5.825546002533 Stdev: 0.107332102954

Max : 6.026000022888 Min : 5.607999801636

SNAPAccuracy

../DCU/g15may.003.dat.2j e231t3.dat.digi2J

Comparing:

../DCU/g15may.003.dat.2j with e231t3.dat.digi2J

Average:

19.758325455405

Stdev: 2.616721391678 Max: 29.702327728271 Min: 13.186768531799

SNAPAccuracy

../DCU/g15may.003.dat.3j

e231t3.dat.digi3J

Comparing:

../DCU/g15may.003.dat.3j with e231t3.dat.digi3J

Average:

21.145178673238

Stdev: 2.783846378326 Max: 30.071254730225 Min: 13.949705123901

SNAPAccuracy

../DCU/g15may.003.dat.1g

e231t3.dat.digi1G

Comparing: ../DCU/g15may.003.dat.1g

with e231t3.dat.digi1G Average: 5.828502009332 Stdev: 0.108160868287 Max: 6.029000282288 Min: 5.607999801636

SNAPAccuracy

../DCU/g15may.003.dat.2g

e231t3.dat.digi2G

Comparing: ../DCU/g15may.003.dat.2g

with e231t3.dat.digi2G Average: 13.697120762447 Stdev: 2.757194042206 Max: 17.927053451538 Min: 9.338016510010

SNAPAccuracy

../DCU/g15may.003.dat.3g

e231t3.dat.digi3G

Comparing: ../DCU/g15may.003.dat.3g

with e231t3.dat.digi3G Average: 15.640199853141 Stdev: 2.656384468079 Max: 19.878501892090 Min: 10.270707130432

7.3.4 Stats.004

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.00223404 Maximum: 0.006426 2nd Max: 0.001582 Minimum: 0.000494

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00223536 Maximum: 0.006426 2nd Max: 0.002373 Minimum: 0.00079

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 1411 Count: 1257 Average: 1877.46 Maximum: 10752.7 2nd Max: 3378.38 Minimum: -142857

Frames: 254305

Average: 0.000211889 Maximum: 0.01089 2nd Max: 0.010593 Minimum: 1.9e-05

PDUs from Net1: 1394 PDUs from Net2: 1411

PDU Buffer 1

 Stats from CircularBuffer --NumPass: 1394
 Average: 0.0454887
 Variance: 0.000102942
 Maximum: 0.080393

2nd Max: 0.066635 Minimum: 0.010678

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 1411 Average: 0.0451505 Variance: 0.000105951 Maximum: 0.08018 2nd Max: 0.075435 Minimum: 9.9e-05

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.050641 Maximum: 0.310394 Minimum: 0.000020 Variance: 0.000691 Std Dev: 0.026280

SNAPTimes.pl Sel-J Tss avg.:

0.0012789025844048632

Sel-J Tns avg.:

0.00034966003978020876

Sel-J Tnr avg.: 0.00178743538779538

Sel-J Trs avg.:

0.0001839542745012664

Sel-J NIU avg.:

0.0021722803182092684

Sel-J Tgs avg.: 0 Sel-J Tgr avg.: 0

DCUAccuracy j15may.004.dat.g g15may.004.dat.ownship

Average: 14.888702436712 Stdev: 1.790763378143 Max: 20.834081649780 Min: 12.785066604614

DCUAccuracy g15may.004.dat.j j15may.004.dat.ownship

Average: 13.655835424288 Stdev: 1.161049127579 Max : 27.100774765015 Min : 7.995439052582

SNAPAccuracy

../DCU/j15may.004.dat.1j

e241t3.dat.digi1J Comparing:

../DCU/j15may.004.dat.1j with e241t3.dat.digi1J

Average:

13.263716516956

Stdev : 2.672438859940 Max : 17.274042129517

Min: 9.047160148621

SNAPAccuracy

../DCU/j15may.004.dat.2j e241t3.dat.digi2J

Comparing:

../DCU/j15may.004.dat.2j with e241t3.dat.digi2J

Average:

14.207835028248

Stdev: 2.845453500748 Max: 18.425121307373 Min: 9.644261360168

SNAPAccuracy

../DCU/j15may.004.dat.3j e241t3.dat.digi3J

Comparing:

../DCU/j15may.004.dat.3j with e241t3.dat.digi3J

Average:

15.864430579447

Stdev: 2.918635368347 Max: 24.804031372070

Min : 10.276943206787

SNAPAccuracy

../DCU/j15may.004.dat.1g e241t3.dat.digi1G

Comparing:

../DCU/j15may.004.dat.1g with e241t3.dat.digi1G

Average:

19.245103487862

Stdev: 2.589310646057 Max: 25.764287948608 Min: 13.024482727051

SNAPAccuracy

../DCU/j15may.004.dat.2g

e241t3.dat.digi2G Comparing:

../DCU/j15may.004.dat.2g with e241t3.dat.digi2G

Average:

20.064802581834

Stdev: 2.593877792358 Max: 26.125074386597 Min: 13.057620048523

SNAPAccuracy

../DCU/j15may.004.dat.3g

e241t3.dat.digi3G

Comparing: ../DCU/j15may.004.dat.3g

with e241t3.dat.digi3G Average: 21.215910340903 Stdev: 2.847209692001 Max: 30.202976226807 Min: 11.529566764832

SNAPAccuracy

../DCU/g15may.004.dat.1j

e241t3.dat.digi1J

Comparing: ../DCU/g15may.004.dat.1j

with e241t3.dat.digi1J Average: 19.539988219253 Stdev: 2.844403982162

Max : 35.484878540039 Min : 11.412705421448

SNAPAccuracy

../DCU/g15may.004.dat.2j

e241t3.dat.digi2J

Comparing: ../DCU/g15may.004.dat.2j

with e241t3.dat.digi2J Average: 20.186706722871 Stdev: 2.911539554596 Max: 36.436870574951 Min: 13.593011856079

SNAPAccuracy

../DCU/g15may.004.dat.3j

e241t3.dat.diqi3J

Comparing: ../DCU/g15may.004.dat.3j

with e241t3.dat.digi3J Average: 21.473732795793 Stdev: 3.182025194168 Max: 37.272525787354 Min: 13.882781982422

SNAPAccuracy

../DCU/g15may.004.dat.1g

e241t3.dat.digi1G

Comparing: ../DCU/g15may.004.dat.1g

with e241t3.dat.digi1G Average: 13.472604507400 Stdev: 2.972241878510 Max: 31.701377868652 Min: 8.484454154968

SNAPAccuracy

../DCU/g15may.004.dat.2g

e241t3.dat.digi2G

Comparing: ../DCU/g15may.004.dat.2g

with e241t3.dat.digi2G

Average: 14.419600184887 Stdev: 3.137582302094 Max: 32.756851196289 Min: 9.285559654236

SNAPAccuracy

../DCU/g15may.004.dat.3g

e241t3.dat.digi3G

Comparing: ../DCU/g15may.004.dat.3g

with e241t3.dat.digi3G Average: 16.196194723729 Stdev: 3.168177843094 Max: 33.666336059570 Min: 9.957441329956

7.3.5 Stats.005

(No Stats.005 data file was taken)

7.3.6 Stats.006

/usr1/figd/DIS2.2/dis_lite3.stats

Frames: 500

Average: 0.00111539 Maximum: 0.006427 2nd Max: 0.002966 Minimum: 0.000186

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 501

Average: 0.00112899 Maximum: 0.00613 2nd Max: 0.005933 Minimum: 0.000186

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 33 Count: 33 Average: 1989.19 Maximum: 3367 2nd Max: 2024.29 Minimum: 1011.12

Frames: 340740 Average: 0.000204228 Maximum: 0.010198 2nd Max: 0.010198 Minimum: 8.8e-05 PDUs from Net1: 20 PDUs from Net2: 33

PDU Buffer 1
-- Stats from
CircularBuffer -NumPass: 20

CircularBuffer ---

Average: 0.0443811 Variance: 6.28944e-05 Maximum: 0.061989 2nd Max: 0.060606 Minimum: 0.032033 -- End Stats from

PDU Buffer 2
-- Stats from
CircularBuffer -NumPass: 33
Average: 0.0453138
Variance: 0.000108124
Maximum: 0.064164
2nd Max: 0.059419
Minimum: 0.019081
-- End Stats from

SNAPPdus.pl Average: 0.061261 Maximum: 0.466594 Minimum: 0.004370 Variance: 0.005109 Std Dev: 0.071476

CircularBuffer ---

SNAPTimes.pl Sel-J Tss avg.:

0.0013448151095246546

Sel-J Tns avg.:

0.000356499006012737

Sel-J Tnr avg.:

0.0006329145129436995

Sel-J Trs avg.:

0.00018556063610745158

Sel-J NIU avg.:

0.0010255864811480272

Sel-J Tgs avg.: 0 Sel-J Tgr avg.: 0

DCUAccuracy j15may.006.dat.g g15may.006.dat.ownship Average:

22.070795532196

Stdev: 16.417076110840 Max: 60.772888183594 Min: 9.387167930603 DCUAccuracy g15may.006.dat.j

j15may.006.dat.ownship Average: 25.147368734883 Stdev: 18.087919235229 Max: 54.908569335938 Min: 13.174493789673

SNAPAccuracy

../DCU/j15may.006.dat.1j

e211t3l.dat.digi1J

Comparing: ../DCU/j15may.006.dat.1j

with e211t3l.dat.digi1J Average: 5.797015753178 Stdev: 0.155003666878 Max: 6.026000022888 Min: 3.345000028610

SNAPAccuracy

../DCU/j15may.006.dat.2j

e211t3l.dat.digi2J

Comparing: ../DCU/j15may.006.dat.2j

with e211t3l.dat.digi2J Average: 5.797015753178 Stdev: 0.155003666878 Max: 6.026000022888 Min: 3.345000028610

SNAPAccuracy

../DCU/j15may.006.dat.3j

e211t3l.dat.digi3J

Comparing: ../DCU/j15may.006.dat.3j

with e211t3l.dat.digi3J Average: 8.764128878622 Stdev: 3.027103900909 Max: 12.046999931335 Min: 5.586999893188

SNAPAccuracy

../DCU/j15may.006.dat.1g

e211t3l.dat.digi1G

Comparing: ../DCU/j15may.006.dat.1g

with e211t3l.dat.digi1G Average: 26.828367163637 Stdev: 3.042198181152 Max: 30.022500991821 Min: 18.000000000000

SNAPAccuracy

../DCU/j15may.006.dat.2g

e211t3l.dat.digi2G

Comparing: ../DCU/j15may.006.dat.2g

with e211t3l.dat.digi2G Average: 20.747588875328 Stdev: 2.983207702637 Max: 24.0000000000000 Min: 17.617000579834

../DCU/j15may.006.dat.3g

e211t3l.dat.digi3G

Comparing: ../DCU/j15may.006.dat.3g

with e211t3l.dat.digi3G Average: 26.760535399119 Stdev : 3.012795925140 Max : 30.031000137329 Min : 23.607999801636

SNAPAccuracy

../DCU/g15may.006.dat.1j

e211t3l.dat.digi1J

Comparing: ../DCU/g15may.006.dat.1j

with e211t3l.dat.digi1J Average: 20.752118097116 Stdev: 3.001052618027 Max: 24.025999069214 Min: 17.611000061035

SNAPAccuracy

../DCU/g15may.006.dat.2j

e211t3l.dat.digi2J

Comparing: ../DCU/g15may.006.dat.2j

with e211t3l.dat.digi2J Average: 23.817684835159 Stdev: 0.107877530158 Max: 24.026399612427 Min: 23.597000122070

SNAPAccuracy

../DCU/g15may.006.dat.3j

e211t3l.dat.digi3J

Comparing: ../DCU/g15may.006.dat.3j

with e211t3l.dat.digi3J Average: 20.752118097116 Stdev: 3.001052618027 Max: 24.025999069214 Min: 17.611000061035

SNAPAccuracy

../DCU/g15may.006.dat.1g

e211t3l.dat.digi1G

Comparing: ../DCU/g15may.006.dat.1g

with e211t3l.dat.digi1G Average: 5.801883840079 Stdev: 0.107925787568 Max: 6.021999835968 Min: 5.593999862671

SNAPAccuracy

../DCU/g15may.006.dat.2g

e211t3l.dat.digi2G

Comparing: ../DCU/g15may.006.dat.2g

with e211t3l.dat.digi2G Average: 5.801883840079 Stdev: 0.107925787568 Max: 6.021999835968 Min: 5.593999862671 **SNAPAccuracy**

../DCU/g15may.006.dat.3g

e211t3l.dat.digi3G Comparing:

../DCU/g15may.006.dat.3g with e211t3l.dat.digi3G Average: 8.769051510397 Stdev: 3.015309572220 Max: 12.043000221252

Min : 5.598999977112

7.3.7 Stats.007

/usr1/figd/DIS2.2/dis_lite3.

stats

Frames: 502

Average: 0.00147687 Maximum: 0.011088 2nd Max: 0.006624 Minimum: 0.000395

RateErr: 0

/usr1/figd/DIS2.2/dis lite4.

stats

Frames: 500

Average: 0.00134681 Maximum: 0.011384 2nd Max: 0.011285

Minimum: 0.000495 RateErr: 0

/sq16/usr1/nets/DISNET/di

snet7.stats PDUs: 494 Count: 486 Average: 2014.38 Maximum: 3424.66 2nd Max: 3378.38 Minimum: -108.589

Frames: 303295 Average: 0.000206045 Maximum: 0.010296 2nd Max: 0.010198 Minimum: 8.8e-05

PDUs from Net1: 477 PDUs from Net2: 494

PDU Buffer 1
-- Stats from
CircularBuffer -NumPass: 477

Average: 0.0449666 Variance: 0.000105231 Maximum: 0.075929 2nd Max: 0.070294 Minimum: 0.012753

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 494 Average: 0.0449275 Variance: 0.000105007 Maximum: 0.07761 2nd Max: 0.069799 Minimum: 0.015027

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.085240 Maximum: 2.994469 Minimum: 0.000017 Variance: 0.022315 Std Dev: 0.149382

SNAPTimes.pl

Sel-J Tss avg.:

0.0012818230617351442

Sel-J Tns avg.:

0.00041509741533000976

Sel-J Tnr avg.:

0.00089756063622826153

Sel-J Trs avg.:

0.00018255467188767218

Sel-J NIU avg.:

0.0014151610337659738

Sel-J Tgs avg.: 0 Sel-J Tgr avg.: 0

DCUAccuracy j15may.007.dat.g

g15may.007.dat.ownship Average: 22.924140325219 Stdev: 17.669275283813 Max: 65.360191345215 Min: 12.886663436890

DCUAccuracy g15may.007.dat.j

j15may.007.dat.ownship Average: 25.116035099952 Stdev : 18.132219314575 Max : 54.960552215576 Min : 13.202637672424

SNAPAccuracy

../DCU/j15may.007.dat.1j

e221t3l.dat.digi1J

Comparing: ../DCU/j15may.007.dat.1j

with e221t3l.dat.digi1J Average: 5.817775928057 Stdev: 0.108817897737 Max: 6.036299705505 Min : 5.618000030518

SNAPAccuracy

../DCU/j15may.007.dat.2j

e221t3l.dat.digi2J

Comparing: ../DCU/j15may.007.dat.2j

with e221t3l.dat.digi2J Average: 5.817775928057 Stdev: 0.108817897737 Max : 6.036299705505 Min : 5.618000030518

SNAPAccuracy

../DCU/j15may.007.dat.3j

e221t3l.dat.digi3J

Comparing: ../DCU/j15may.007.dat.3j

with e221t3l.dat.digi3J Average: 14.285560104046 Stdev: 2.674010753632 Max: 18.757400512695 Min : 9.419964790344

SNAPAccuracy

../DCU/j15may.007.dat.1g

e221t3l.dat.digi1G

Comparing: ../DCU/j15may.007.dat.1g

with e221t3l.dat.digi1G Average: 20.854266926918 Stdev: 3.006431341171 Max : 24.039899826050 Min : 17.629999160767

SNAPAccuracy

../DCU/j15may.007.dat.2g

e221t3l.dat.digi2G

Comparing: ../DCU/j15may.007.dat.2g

with e221t3l.dat.digi2G Average: 26.873094104215 Stdev: 3.011200666428 Max : 30.039899826050 Min : 23.621999740601

SNAPAccuracy

../DCU/j15may.007.dat.3g

e221t3l.dat.digi3G

Comparing: ../DCU/i15may.007.dat.3g

with e221t3l.dat.digi3G Average: 20.839243567087 Stdev: 6.198485374451 Max : 66.989456176758 Min : 13.335025787354

SNAPAccuracy

../DCU/g15may.007.dat.1j

e221t3l.dat.digi1J

Comparing: ../DCU/g15may.007.dat.1j

with e221t3l.dat.digi1J Average: 23.786895122645 Stdev: 0.107544563711

Max : 24.000000000000

Min : 23.576000213623

SNAPAccuracy

../DCU/g15may.007.dat.2j e221t3l.dat.digi2J

Comparing:

../DCU/g15may.007.dat.2j with e221t3l.dat.digi2J

Average:

23.786895122645

Stdev: 0.107544563711 Max : 24.000000000000 Min : 23.576000213623

SNAPAccuracy

../DCU/g15may.007.dat.3j e221t3l.dat.digi3J

Comparing:

../DCU/g15may.007.dat.3j with e221t3l.dat.digi3J

Average:

20.816248721224

Stdev: 7.730781078339 Max: 83.515548706055 Min : 13.284584045410

SNAPAccuracy

../DCU/g15may.007.dat.1g e221t3l.dat.digi1G

Comparing:

../DCU/g15may.007.dat.1g with e221t3l.dat.digi1G

Average: 5.816544537602 Stdev: 0.108311779797 Max : 6.026400089264 Min: 5.602999687195

SNAPAccuracy

../DCU/g15may.007.dat.2g e221t3l.dat.digi2G

Comparing:

../DCU/g15may.007.dat.2g with e221t3l.dat.digi2G Average: 5.816544537602

Stdev: 0.108311779797 Max : 6.026400089264 Min : 5.602999687195

SNAPAccuracy

../DCU/g15may.007.dat.3g

e221t3l.dat.digi3G

Comparing:

../DCU/g15may.007.dat.3g

with e221t3l.dat.digi3G Average:

15.154154233122

Stdev: 2.587110996246 Max : 26.745962142944 Min : 9.544189453125

7.3.8 Stats.008

/usr1/figd/DIS2.2/dis lite3.stats

Frames: 503

Average: 0.00169293 Maximum: 0.005636 2nd Max: 0.001581 Minimum: 0.000989

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 503

Average: 0.00162744 Maximum: 0.004745 2nd Max: 0.001285 Minimum: 0.000889

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 950 Count: 907 Average: 2119.27 Maximum: 5076.14 2nd Max: 5050.51 Minimum: -664.011

Frames: 288847 Average: 0.000207448 Maximum: 0.01079 2nd Max: 0.010677 Minimum: 8.9e-05

PDUs from Net1: 936 PDUs from Net2: 950

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 936 Average: 0.0451774 Variance: 0.000101901 Maximum: 0.076918 2nd Max: 0.075929 Minimum: 0.012854

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 950 Average: 0.0454933 Variance: 0.000103076 Maximum: 0.072172

2nd Max: 0.071481 Minimum: 0.012754

-- End Stats from CircularBuffer --

SNAPPdus.pl Average: 0.059201 Maximum: 1.787644 Minimum: 0.000006 Variance: 0.007652

Std Dev: 0.087479

SNAPTimes.pl Sel-J Tss avg.:

0.0012830000000694077

Sel-J Tns avg.:

0.00038308747517253749

Sel-J Tnr avg.:

0.0012127316102694958

Sel-J Trs avg.:

0.0004025288270756317

Sel-J NIU avg.:

0.0016323916500822638

Sel-J Tgs avg.: 0 Sel-J Tgr avg.: 0

DCUAccuracy j15may.008.dat.g

g15may.008.dat.ownship Average: 21.405374173195 Stdev : 15.651482582092 Max : 60.562931060791 Min : 12.885663986206

DCUAccuracy g15may.008.dat.j

j15may.008.dat.ownship Average: 23.897885501385 Stdev: 17.552316665649 Max: 54.817867279053 Min: 13.085317611694

SNAPAccuracy

../DCU/j15may.008.dat.1j

e231t3l.dat.digi1J

Comparing: ../DCU/j15may.008.dat.1j

with e231t3l.dat.digi1J Average: 5.817065200575 Stdev: 0.108650363982 Max: 6.043499946594 Min: 5.611000061035

SNAPAccuracy

../DCU/j15may.008.dat.2j

e231t3l.dat.digi2J

Comparing: ../DCU/j15may.008.dat.2j

with e231t3l.dat.digi2J Average: 13.556842349185 Stdev: 2.702134847641 Max: 17.972913742065 Min: 9.181145668030 **SNAPAccuracy**

../DCU/j15may.008.dat.3j

e231t3l.dat.digi3J Comparing:

../DCU/j15may.008.dat.3j with e231t3l.dat.digi3J

Average:

15.593626361977

Stdev: 3.339934349060 Max: 33.621288299561 Min: 10.023968696594

SNAPAccuracy

../DCU/j15may.008.dat.1g

e231t3l.dat.digi1G

Comparing:

../DCU/j15may.008.dat.1g with e231t3l.dat.digi1G

Average:

23.844281013566

Stdev: 5.992016315460 Max: 30.017400741577 Min: 17.624000549316

SNAPAccuracy

../DCU/j15may.008.dat.2g

e231t3l.dat.digi2G

Comparing:

../DCU/j15may.008.dat.2g

with e231t3l.dat.digi2G

Average:

20.551697582669

Stdev: 6.027653217316 Max: 66.862792968750

Min: 13.118022918701

SNAPAccuracy

../DCU/j15may.008.dat.3g e231t3l.dat.digi3G

0201101.001.0

Comparing: /DCII/i15ma

../DCU/j15may.008.dat.3g with e231t3l.dat.digi3G

Average:

21.955009545392

Stdev: 6.890682697296 Max: 83.539367675781

Min : 14.077318191528

SNAPAccuracy

../DCU/g15may.008.dat.1j e231t3l.dat.digi1J

Comparing:

../DCU/g15may.008.dat.1j with e231t3l.dat.digi1J

Average:

26.833000591548

Stdev: 3.021643400192 Max: 30.005100250244 Min: 18.000000000000 **SNAPAccuracy**

../DCU/g15may.008.dat.2j

e231t3l.dat.digi2J

Comparing: ../DCU/g15may.008.dat.2i

with e231t3l.dat.digi2J Average: 20.506352836917 Stdev: 6.281029701233 Max: 66.920265197754 Min: 11.584857940674

SNAPAccuracy

../DCU/g15may.008.dat.3j

e231t3l.dat.digi3J

Comparing: ../DCU/q15may.008.dat.3i

with e231t3l.dat.digi3J Average: 22.031778995807 Stdev: 6.184450149536 Max: 66.995758056641 Min: 13.914773941040

SNAPAccuracy

../DCU/g15may.008.dat.1g

e231t3l.dat.digi1G

Comparing: ../DCU/g15may.008.dat.1g

with e231t3l.dat.digi1G Average: 5.829002816912 Stdev: 0.108036793768 Max: 6.068000316620 Min: 5.610000133514

SNAPAccuracy

../DCU/g15may.008.dat.2g

e231t3l.dat.digi2G

Comparing: ../DCU/g15may.008.dat.2g

with e231t3l.dat.digi2G Average: 13.719395338170 Stdev: 2.731099843979 Max: 18.052045822144 Min: 9.305132865906

SNAPAccuracy

../DCU/g15may.008.dat.3g

e231t3l.dat.digi3G

Comparing: ../DCU/g15may.008.dat.3g

with e231t3l.dat.digi3G Average: 15.598008031097 Stdev: 2.628740072250 Max: 26.745962142944 Min: 9.999383926392

7.3.9 Stats.009

/usr1/figd/DIS2.2/dis lite3.stats

Frames: 502

Average: 0.00187257 Maximum: 0.006129 2nd Max: 0.003163 Minimum: 0.000593

RateErr: 0

/usr1/figd/DIS2.2/dis lite4.stats

Frames: 501

Average: 0.00181647 Maximum: 0.006328 2nd Max: 0.002768 Minimum: 0.000494

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 1415 Count: 1112 Average: 2017.43 Maximum: 3401.36 2nd Max: 3378.38 Minimum: -9259.26

Frames: 333805 Average: 0.000209815 Maximum: 0.01305 2nd Max: 0.011468 Minimum: 7.9e-05

PDUs from Net1: 1406 PDUs from Net2: 1415

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 1406 Average: 0.0460138 Variance: 9.62197e-05 Maximum: 0.076028 2nd Max: 0.075435 Minimum: 0.014928

- End Stats from CircularBuffer --

PDU Buffer 2

- Stats from CircularBuffer -

NumPass: 1415 Average: 0.0449067 Variance: 9.8063e-05 Maximum: 0.077328 2nd Max: 0.075435 Minimum: 0.014533

- End Stats from CircularBuffer -

SNAPPdus.pl Average: 0.051719 Maximum: 0.523460 Minimum: 0.000009 Variance: 0.000895 Std Dev: 0.029909 SNAPTimes.pl Sel-J Tss avg.:

0.0013231689859518159

Sel-J Tns avg.:

0.00035020477147370199

Sel-J Tnr avg.:

0.0013751312126947112

Sel-J Trs avg.:

0.0001820119285267948

Sel-J NIU avg.:

0.0017585387675852606

Sel-J Tgs avg.: 0 Sel-J Tgr avg.: 0

DCUAccuracy i15may.009.dat.g

g15may.009.dat.ownship

Average:

25.365288722876

Stdev: 22.624711990356 Max: 77.944610595703 Min: 9.386178970337

DCUAccuracy g15may.009.dat.j j15may.009.dat.ownship

Average:

28.482561269433

Stdev: 24.166830062866 Max: 78.862915039062 Min: 10.093287467957

SNAPAccuracy

../DCU/j15may.009.dat.1j

e241t3l.dat.digi1J Comparing:

../DCU/j15may.009.dat.1j with e241t3l.dat.digi1J

Average:

13.745130442415

Stdev: 3.184179067612 Max: 33.780338287354 Min: 9.047160148621

SNAPAccuracy

../DCU/j15may.009.dat.2j

e241t3l.dat.digi2J

Comparing:

../DCU/j15may.009.dat.2j with e241t3l.dat.digi2J

Average:

14.681793824864

Stdev: 3.294211149216 Max: 34.974098205566 Min: 9.643389701843

SNAPAccuracy

../DCU/j15may.009.dat.3j

e241t3l.dat.digi3J

Comparing: ../DCU/j15may.009.dat.3j

with e241t3l.dat.digi3J Average: 16.066821640802 Stdev: 3.096422910690 Max: 36.012325286865 Min: 10.407088279724

SNAPAccuracy

../DCU/j15may.009.dat.1g

e241t3l.dat.digi1G

Comparing: ../DCU/j15may.009.dat.1g

with e241t3l.dat.digi1G Average: 20.594209232951 Stdev: 6.256250858307 Max: 83.489646911621 Min: 13.104102134705

SNAPAccuracy

../DCU/j15may.009.dat.2g

e241t3l.dat.digi2G

Comparing: ../DCU/j15may.009.dat.2g

with e241t3l.dat.digi2G Average: 21.239936612577 Stdev: 7.021228790283 Max: 83.539611816406 Min: 13.444418907166

SNAPAccuracy

../DCU/j15may.009.dat.3g

e241t3l.dat.digi3G

Comparing: ../DCU/j15may.009.dat.3g

with e241t3l.dat.digi3G Average: 22.710014634608 Stdev: 7.985307216644 Max: 83.707717895508 Min: 12.316145896912

SNAPAccuracy

../DCU/g15may.009.dat.1j

e241t3l.dat.digi1J

Comparing: ../DCU/q15may.009.dat.1i

with e241t3l.dat.digi1J Average: 21.049834243650 Stdev: 7.512876510620 Max: 83.680305480957 Min: 13.099409103394

SNAPAccuracy

../DCU/g15may.009.dat.2j

e241t3l.dat.digi2J

Comparing: ../DCU/g15may.009.dat.2j

with e241t3l.dat.digi2J Average: 21.428270425254 Stdev: 4.923634052277 Max: 54.359687805176 Min: 13.562582969666

../DCU/g15may.009.dat.3j

e241t3l.dat.digi3J

Comparing: ../DCU/g15may.009.dat.3j

with e241t3l.dat.digi3J Average: 22.613146973819 Stdev: 5.149258136749 Max: 54.359943389893 Min: 13.903475761414

SNAPAccuracy

../DCU/g15may.009.dat.1g

e241t3l.dat.digi1G

Comparing: ../DCU/g15may.009.dat.1g

with e241t3l.dat.digi1G Average: 13.857319426440 Stdev: 2.993654966354 Max: 33.943874359131 Min: 9.170610427856

SNAPAccuracy

../DCU/g15may.009.dat.2g

e241t3l.dat.digi2G

Comparing: ../DCU/g15may.009.dat.2g

with e241t3l.dat.digi2G Average: 14.797997762317 Stdev: 3.136909484863 Max: 35.137210845947 Min: 9.770715713501

SNAPAccuracy

../DCU/g15may.009.dat.3g

e241t3l.dat.digi3G

Comparing: ../DCU/g15may.009.dat.3g

with e241t3l.dat.digi3G Average: 16.145774903085 Stdev: 2.934475421906 Max: 36.172256469727 Min: 10.611288070679

7.3.10 Stats.010

/usr1/figd/DIS2.2/dis4.stats

Frames: 503 Average: 0.001083 Maximum: 0.007316 2nd Max: 0.001483 Minimum: 0.000396

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00110305 Maximum: 0.006822 2nd Max: 0.002075 Minimum: 0.000495

RateErr: 0

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs : 25 Count : 24 Average: 1759.73

Maximum: 2525.25 2nd Max: 1686.34 Minimum: 94.3931

Frames: 450796 Average: 0.000203845 Maximum: 0.010297 2nd Max: 0.010198 Minimum: 8.8e-05

PDUs from Net1: 16 PDUs from Net2: 25

PDU Buffer 1
-- Stats from
CircularBuffer -NumPass: 16
Average: 0.0438657
Variance: 8.01897e-05
Maximum: 0.06268

2nd Max: 0
Minimum: 0.027386
-- End Stats from
CircularBuffer --

PDU Buffer 2
-- Stats from
CircularBuffer -NumPass: 25

Average: 0.0455457
Variance: 5.83464e-05
Maximum: 0.055959
2nd Max: 0.053487
Minimum: 0.031044
-- End Stats from
CircularBuffer --

SNAPPdus.pl Average: 0.047985 Maximum: 0.068263 Minimum: 0.031094 Variance: 0.000066 Std Dev: 0.008114

SNAPTimes.pl Sel-J Tss avg.:

0.0013484831014833234

Sel-J Tns avq.:

0.00034104373765621933

Sel-J Tnr avg.:

0.0006639502980634311

Sel-J Trs avg.:

0.0001837574552768234

Sel-J NIU avg.:

0.0010435248508255106

Sel-J Tgs avg.: 0 Sel-J Tgr avg.: 0

DCUAccuracy j15may.010.dat.g

g15may.010.dat.ownship Average: 0.874673890145 Stdev: 0.815470457077 Max: 4.858421325684 Min: 0.086501218379

DCUAccuracy g15may.010.dat.j

j15may.010.dat.ownship Average: 1.218773922324 Stdev: 1.021826624870 Max: 4.849093914032 Min: 0.061741396785

SNAPAccuracy

../DCU/j15may.010.dat.1j

e211t3d.dat.digi1J

Comparing: ../DCU/j15may.010.dat.1j

with e211t3d.dat.digi1J Average: 0.242493737677 Stdev: 0.106850676239 Max: 0.465999990702 Min: 0.02983999974

SNAPAccuracy

../DCU/j15may.010.dat.2j

e211t3d.dat.digi2J

Comparing: ../DCU/j15may.010.dat.2j

with e211t3d.dat.digi2J Average: 0.119250061118 Stdev : 0.084471203387 Max : 0.326220005751 Min : 0.0000000000000

SNAPAccuracy

../DCU/j15may.010.dat.3j

e211t3d.dat.digi3J

Comparing: ../DCU/j15may.010.dat.3j

with e211t3d.dat.digi3J Average: 0.380015798319 Stdev: 0.110325969756 Max: 0.622439980507 Min: 0.164000004530

SNAPAccuracy

../DCU/j15may.010.dat.1g

e211t3d.dat.digi1G

Comparing: ../DCU/j15may.010.dat.1g

with e211t3d.dat.digi1G Average: 0.245891829589

7-74

Stdev: 0.106287524104 Max: 0.465999990702 Min: 0.032000001520

SNAPAccuracy

../DCU/j15may.010.dat.2g

e211t3d.dat.digi2G

Comparing: ../DCU/j15may.010.dat.2g

with e211t3d.dat.digi2G Average: 0.117041098049 Stdev: 0.082828044891 Max: 0.307020008564 Min: 0.0000000000000

SNAPAccuracy

../DCU/j15may.010.dat.3g

e211t3d.dat.digi3G

Comparing: ../DCU/j15may.010.dat.3g

with e211t3d.dat.digi3G Average: 0.377438232091 Stdev : 0.109449900687 Max : 0.603229999542 Min : 0.164000004530

SNAPAccuracy

../DCU/g15may.010.dat.1j

e211t3d.dat.digi1J

Comparing: ../DCU/g15may.010.dat.1j

with e211t3d.dat.digi1J Average: 0.169355371970 Stdev: 0.103287279606 Max: 0.372999995947 Min: 0.0000000000000

SNAPAccuracy

../DCU/g15may.010.dat.2j

e211t3d.dat.digi2J

Comparing: ../DCU/q15may.010.dat.2i

with e211t3d.dat.digi2J Average: 0.170255528754 Stdev: 0.105421081185 Max: 0.411720007658 Min: 0.0000000000000

SNAPAccuracy

../DCU/g15may.010.dat.3j

e211t3d.dat.digi3J

Comparing: ../DCU/g15may.010.dat.3j

with e211t3d.dat.digi3J Average: 0.451675336211 Stdev: 0.110576480627 Max: 0.707939982414 Min: 0.219999998808

SNAPAccuracy

../DCU/g15may.010.dat.1g

e211t3d.dat.digi1G

Comparing: ../DCU/g15may.010.dat.1g

with e211t3d.dat.digi1G

Average: 0.169962606602 Stdev: 0.105761036277 Max: 0.393000006676 Min: 0.0000000000000

SNAPAccuracy

../DCU/g15may.010.dat.2g e211t3d.dat.digi2G

Comparing:

../DCU/g15may.010.dat.2g with e211t3d.dat.digi2G Average: 0.173995717556 Stdev: 0.106187559664 Max: 0.411720007658

Min : 0.000000000000

SNAPAccuracy

../DCU/g15may.010.dat.3g e211t3d.dat.digi3G

Comparing:

../DCU/g15may.010.dat.3g with e211t3d.dat.digi3G Average: 0.453779637934

Stdev: 0.110889509320 Max: 0.707939982414 Min: 0.219999998808

7.3.11 Stats.011

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.00156867 Maximum: 0.007118 2nd Max: 0.001582 Minimum: 0.00079

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00151186 Maximum: 0.007217 2nd Max: 0.007118 Minimum: 0.000285

RateErr: 0

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs: 485 Count: 480 Average: 1842.15 Maximum: 5181.35 2nd Max: 3378.38 Minimum: -311.624 Frames: 168907 Average: 0.000209664 Maximum: 0.010198 2nd Max: 0.010098 Minimum: 9e-05

PDUs from Net1: 477 PDUs from Net2: 485

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 477 Average: 0.0448736 Variance: 0.000101036 Maximum: 0.072073 2nd Max: 0.065648 Minimum: 0.010974

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 485 Average: 0.0450578 Variance: 0.000106579 Maximum: 0.073358 2nd Max: 0.068218 Minimum: 0.017301

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.048872 Maximum: 0.080538 Minimum: 0.015442 Variance: 0.000107 Std Dev: 0.010347

SNAPTimes.pl

Sel-J Tss avg.:

0.0013341908548975031

Sel-J Tns avg.:

0.00035752286268298644

Sel-J Tnr avg.:

0.001044469184851923

Sel-J Trs avg.:

0.00062427833005387857

Sel-J NIU avg.:

0.001443872763300833

Sel-J Tgs avg.: 0 Sel-J Tgr avg.: 0

DCUAccuracy j15may.011.dat.g g15may.011.dat.ownship Average: 0.866732631510 Stdev: 0.761998772621 Max: 4.650048732758

DCUAccuracy g15may.011.dat.j

j15may.011.dat.ownship

Min : 0.067719966173

Average: 1.226110312937 Stdev: 1.016256570816 Max : 4.848155498505 Min : 0.087664134800

SNAPAccuracy

../DCU/j15may.011.dat.1j e221t3d.dat.digi1J

Comparing: ../DCU/j15may.011.dat.1j

with e221t3d.dat.digi1J Average: 0.264022088449 Stdev: 0.107503578067 Max : 0.469000011683 Min : 0.064999997616

SNAPAccuracy

../DCU/j15may.011.dat.2j

e221t3d.dat.digi2J

Comparing: ../DCU/j15may.011.dat.2j

with e221t3d.dat.digi2J Average: 0.117866204742 Stdev: 0.082747422159 Max : 0.313840001822 Min : 0.001000000047

SNAPAccuracy

../DCU/j15may.011.dat.3j e221t3d.dat.digi3J

Comparing: ../DCU/j15may.011.dat.3j

with e221t3d.dat.digi3J Average: 6.943955271598 Stdev: 2.535121679306 Max : 10.200250625610 Min: 1.060795903206

SNAPAccuracy

../DCU/j15may.011.dat.1g e221t3d.dat.digi1G

Comparing: ../DCU/j15may.011.dat.1g

with e221t3d.dat.digi1G Average: 0.267405858651 Stdev: 0.106913305819 Max : 0.469000011683 Min : 0.064999997616

SNAPAccuracy

../DCU/j15may.011.dat.2g

e221t3d.dat.digi2G

Comparing: ../DCU/j15may.011.dat.2g

with e221t3d.dat.digi2G Average: 0.122256270295 Stdev: 0.086427204311 Max : 0.313840001822 Min : 0.000000000000

SNAPAccuracy

../DCU/j15may.011.dat.3g e221t3d.dat.digi3G

Comparing:

../DCU/j15may.011.dat.3g with e221t3d.dat.digi3G

Average:

16.671630256259

Stdev: 4.174486160278 Max : 29.367958068848 Min : 2.446295261383

SNAPAccuracy

../DCU/g15may.011.dat.1j e221t3d.dat.digi1J

Comparing:

../DCU/g15may.011.dat.1j with e221t3d.dat.digi1J Average: 0.188767347451 Stdev: 0.106645204127

Max : 0.386000007391 Min: 0.00499999888

SNAPAccuracy

../DCU/g15may.011.dat.2j e221t3d.dat.digi2J

Comparing:

../DCU/g15may.011.dat.2j with e221t3d.dat.digi2J Average: 0.167170485114 Stdev: 0.106052078307 Max : 0.392140001059

Min : 0.001000000047

SNAPAccuracy

../DCU/g15may.011.dat.3j e221t3d.dat.digi3J

Comparing:

../DCU/g15may.011.dat.3j with e221t3d.dat.digi3J

Average:

16.426415697734

Stdev: 4.393938064575 Max : 27.912736892700

Min : 2.821816682816

SNAPAccuracy

../DCU/g15may.011.dat.1g e221t3d.dat.digi1G

Comparing:

../DCU/g15may.011.dat.1g with e221t3d.dat.digi1G Average: 0.189322490575 Stdev: 0.108394451439 Max : 0.398000001907

Min : 0.000000000000

SNAPAccuracy

../DCU/g15may.011.dat.2g

e221t3d.dat.digi2G

Comparing: ../DCU/g15may.011.dat.2g

with e221t3d.dat.digi2G Average: 0.182741124696 Stdev: 0.108005411923 Max : 0.392140001059 Min : 0.001000000047

SNAPAccuracy

../DCU/g15may.011.dat.3g

e221t3d.dat.digi3G

Comparing: ../DCU/g15may.011.dat.3g

with e221t3d.dat.digi3G Average: 6.828101347728 Stdev: 2.523530244827 Max: 10.176090240479 Min : 1.197994947433

7.3.12 Stats.012

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.00188031 Maximum: 0.00613 2nd Max: 0.002373 Minimum: 0.000593

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00199935 Maximum: 0.006822 2nd Max: 0.002768 Minimum: 0.000692

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 945 Count : 901 Average: 2061.1 Maximum: 3378.38 2nd Max: 3378.38 Minimum: -3278.69

Frames: 147296 Average: 0.000216479 Maximum: 0.010692 2nd Max: 0.010296 Minimum: 1.9e-05

PDUs from Net1: 933 PDUs from Net2: 945

PDU Buffer 1

- Stats from CircularBuffer --

NumPass: 933 Average: 0.0454829 Variance: 0.000101297 Maximum: 0.076227 2nd Max: 0.056552 Minimum: 0.012754

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer -- NumPass: 945
Average: 0.0450671
Variance: 0.000104442
Maximum: 0.075731
2nd Max: 0.073358

Minimum: 0.015621

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.049184 Maximum: 0.080050 Minimum: 0.017326 Variance: 0.000106 Std Dev: 0.010309

SNAPTimes.pl Sel-J Tss avg.:

0.0013473260438570311

Sel-J Tns avg.:

0.00036111729631580462

Sel-J Tnr avg.:

0.0015429204773377936

Sel-J Trs avg.:

0.00018552683890824044

Sel-J NIU avg.:

0.0019378349903096568

Sel-J Tgs avg.: 0 Sel-J Tgr avg.: 0

DCUAccuracy j15may.012.dat.g g15may.012.dat.ownship

Average: 0.892890747141 Stdev: 1.080400347710 Max: 7.990213394165 Min: 0.103305600584

DCUAccuracy g15may.012.dat.j

j15may.012.dat.ownship Average: 1.207610929107 Stdev: 1.695465326309 Max: 20.102064132690 Min: 0.057245086879

SNAPAccuracy

../DCU/j15may.012.dat.1j e231t3d.dat.digi1J

Comparing: ../DCU/j15may.012.dat.1j

with e231t3d.dat.digi1J Average: 1.469821032144 Stdev: 1.276580214500 Max: 3.233199834824 Min: 0.041999999434

SNAPAccuracy

../DCU/j15may.012.dat.2j

e231t3d.dat.digi2J

Comparing:

../DCU/j15may.012.dat.2j with e231t3d.dat.digi2J Average: 4.550588108434 Stdev: 1.233619093895

Max : 9.985651016235 Min : 0.687811732292

SNAPAccuracy

../DCU/j15may.012.dat.3j e231t3d.dat.digi3J

Comparing:

../DCU/j15may.012.dat.3j with e231t3d.dat.digi3J Average: 7.131442994542 Stdev: 2.227188825607 Max: 11.963094711304 Min: 1.830416917801

SNAPAccuracy

../DCU/j15may.012.dat.1g e231t3d.dat.digi1G

Comparing:

../DCU/j15may.012.dat.1g with e231t3d.dat.digi1G Average: 2.201083873032 Stdev : 1.033768057823

Max : 2.905999898911 Min : 0.041999999434

SNAPAccuracy

../DCU/j15may.012.dat.2g e231t3d.dat.digi2G

Comparing:

../DCU/j15may.012.dat.2g with e231t3d.dat.digi2G

Average:

16.017851504369

Stdev: 4.332407474518 Max: 29.683980941772

Min : 2.302090883255

SNAPAccuracy

../DCU/j15may.012.dat.3g

e231t3d.dat.digi3G

Comparing:

../DCU/j15may.012.dat.3g with e231t3d.dat.digi3G

Average:

16.777667237491

Stdev: 4.482458591461 Max: 30.248441696167 Min : 2.836808919907

SNAPAccuracy

../DCU/g15may.012.dat.1j

e231t3d.dat.digi1J

Comparing: ../DCU/g15may.012.dat.1j

with e231t3d.dat.digi1J Average: 2.248739555297 Stdev: 1.087664365768 Max: 2.990999937057 Min: 0.001000000047

SNAPAccuracy

../DCU/g15may.012.dat.2j

e231t3d.dat.digi2J

Comparing: ../DCU/g15may.012.dat.2j

with e231t3d.dat.digi2J Average: 16.185641761718 Stdev: 4.379088401794 Max: 29.267658233643 Min: 2.348482370377

SNAPAccuracy

../DCU/g15may.012.dat.3j

e231t3d.dat.digi3J

Comparing: ../DCU/g15may.012.dat.3j

with e231t3d.dat.digi3J Average: 16.945570199470 Stdev: 4.497604846954 Max: 28.870948791504 Min: 2.947739839554

SNAPAccuracy

../DCU/g15may.012.dat.1g

e231t3d.dat.digi1G

Comparing: ../DCU/g15may.012.dat.1g

with e231t3d.dat.digi1G Average: 1.464774771692 Stdev: 1.346540331841 Max: 3.213999986649 Min: 0.0000000000000

SNAPAccuracy

../DCU/g15may.012.dat.2g

e231t3d.dat.digi2G

Comparing: ../DCU/g15may.012.dat.2g

with e231t3d.dat.digi2G Average: 4.524287112554 Stdev: 1.233391523361 Max: 10.001490592957 Min: 0.784314990044

SNAPAccuracy

../DCU/g15may.012.dat.3g

e231t3d.dat.digi3G

Comparing: ../DCU/g15may.012.dat.3g

with e231t3d.dat.digi3G Average: 7.327353690610 Stdev: 2.100413322449 Max : 10.083305358887 Min : 1.952453017235

7.3.13 Stats.013

/usr1/figd/DIS2.2/dis4.stats

Frames: 500

Average: 0.0022343 Maximum: 0.011483 2nd Max: 0.007119 Minimum: 0.000494

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 500

Average: 0.0022603 Maximum: 0.011483 2nd Max: 0.006722 Minimum: 0.000495

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 1400 Count: 1246 Average: 2001.85 Maximum: 22727.3 2nd Max: 5235.6 Minimum: -9569.38

Frames: 383520 Average: 0.000208798 Maximum: 0.01089 2nd Max: 0.010198 Minimum: 8.8e-05

PDUs from Net1: 1387 PDUs from Net2: 1401

PDU Buffer 1

- Stats from CircularBuffer --NumPass: 1387

Average: 0.0449788 Variance: 0.000100545 Maximum: 0.078105 2nd Max: 0.0698 Minimum: 0.013842

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --NumPass: 1401 Average: 0.0451932

Variance: 0.000106068 Maximum: 0.080392

2nd Max: 0.076819 Minimum: 0.012753 -- End Stats from CircularBuffer ---

SNAPPdus.pl Average: 0.048304 Maximum: 0.082135 Minimum: 0.010752 Variance: 0.000106 Std Dev: 0.010272

SNAPTimes.pl

Sel-J Tss avg.:

0.0013643001988001315

Sel-J Tns avg.:

0.00030619284300034992

Sel-J Tnr avg.:

0.001864111331832724

Sel-J Trs avg.:

0.00018457455256392358

Sel-J NIU avg.:

0.0021619721668518737

Sel-J Tgs avg.: 0 Sel-J Tgr avg.: 0

DCUAccuracy j15may.013.dat.g

g15may.013.dat.ownship Average: 0.786387872657

Stdev: 0.887728095055 Max: 4.858408451080

Min : 0.091292992234

DCUAccuracy

q15may.013.dat.i i15may.013.dat.ownship

Average: 1.226194340683 Stdev: 1.018732547760 Max : 4.848147869110

Min : 0.067230947316

SNAPAccuracy

../DCU/j15may.013.dat.1j e241t3d.dat.digi1J

Comparing:

../DCU/j15may.013.dat.1j with e241t3d.dat.digi1J Average: 4.743526920887

Stdev: 1.535892128944 Max : 10.304005622864

Min : 0.608571112156

SNAPAccuracy

../DCU/j15may.013.dat.2j

e241t3d.dat.digi2J

Comparing: ../DCU/j15may.013.dat.2j

with e241t3d.dat.digi2J Average: 4.815393195730 Stdev: 1.679356575012 Max : 10.122037887573 Min : 1.009578585625

SNAPAccuracy

../DCU/j15may.013.dat.3j

e241t3d.dat.digi3J

Comparing: ../DCU/j15may.013.dat.3j

with e241t3d.dat.digi3J Average: 8.138207824543 Stdev: 1.761752128601 Max : 10.053025245667 Min: 1.901496767998

SNAPAccuracy

../DCU/j15may.013.dat.1g

e241t3d.dat.digi1G

Comparing: ../DCU/j15may.013.dat.1g

with e241t3d.dat.digi1G Average: 16.135937003101 Stdev: 4.224246025085 Max : 26.590293884277 Min : 2.223340988159

SNAPAccuracy

../DCU/j15may.013.dat.2g

e241t3d.dat.digi2G

Comparing: ../DCU/j15may.013.dat.2g

with e241t3d.dat.digi2G Average: 16.464845210927 Stdev: 4.224516868591 Max : 29.413042068481 Min : 2.886884927750

SNAPAccuracy

../DCU/j15may.013.dat.3g

e241t3d.dat.digi3G

Comparing: ../DCU/j15may.013.dat.3g

with e241t3d.dat.digi3G Average: 16.785519162814 Stdev: 4.444766521454 Max : 27.832967758179 Min : 2.837465524673

SNAPAccuracy

../DCU/g15may.013.dat.1j

e241t3d.dat.digi1J

Comparing: ../DCU/g15may.013.dat.1j

with e241t3d.dat.digi1J Average: 16.077969776206 Stdev: 4.297261238098 Max : 28.515254974365

Min: 1.692706465721

../DCU/g15may.013.dat.2j

e241t3d.dat.digi2J

Comparing: ../DCU/g15may.013.dat.2j

with e241t3d.dat.digi2J Average: 16.216703396987 Stdev: 4.337128162384 Max: 29.153429031372 Min: 2.405225515366

SNAPAccuracy

../DCU/g15may.013.dat.3j

e241t3d.dat.digi3J

Comparing: ../DCU/g15may.013.dat.3j

with e241t3d.dat.digi3J Average: 16.757218130220 Stdev: 4.356190681458 Max: 29.685075759888 Min: 2.631009817123

SNAPAccuracy

../DCU/g15may.013.dat.1g

e241t3d.dat.digi1G

Comparing: ../DCU/g15may.013.dat.1g

with e241t3d.dat.digi1G Average: 4.721996194425 Stdev: 1.544313192368 Max: 10.259262084961 Min: 0.588289916515

SNAPAccuracy

../DCU/g15may.013.dat.2g

e241t3d.dat.digi2G

Comparing: ../DCU/g15may.013.dat.2g

with e241t3d.dat.digi2G Average: 4.874011294529 Stdev: 1.711018681526 Max: 10.102996826172 Min: 1.218243837357

SNAPAccuracy

../DCU/g15may.013.dat.3g

e241t3d.dat.digi3G

Comparing: ../DCU/g15may.013.dat.3g

with e241t3d.dat.digi3G Average: 8.051314791766 Stdev: 1.811978220940 Max: 10.048890113831 Min: 2.137738227844

7.3.14 Stats.014

/usr1/figd/DIS2.2/dis_lite3.stats

Frames: 503

Average: 0.00122454 Maximum: 0.006426 2nd Max: 0.001977 Minimum: 0.000593

RateErr: 0

/usr1/figd/DIS2.2/dis lite4.

stats

Frames: 503

Average: 0.00115535 Maximum: 0.004053 2nd Max: 0.001978 Minimum: 0.000594

RateErr: 0

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs: 35 Count: 33 Average: 1888.12 Maximum: 3367 2nd Max: 2538.07 Minimum: -106.304

Frames: 348084 Average: 0.000205432 Maximum: 0.010198 2nd Max: 0.010198 Minimum: 8.8e-05

PDUs from Net1: 22 PDUs from Net2: 35

PDU Buffer 1
-- Stats from

CircularBuffer -- NumPass: 22

Average: 0.0448942 Variance: 8.23174e-05 Maximum: 0.070392 2nd Max: 0.055564 Minimum: 0.028969

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 35

Average: 0.0503206 Variance: 9.68028e-05 Maximum: 0.067032 2nd Max: 0.062103 Minimum: 0.026594

-- End Stats from CircularBuffer --

SNAPPdus.pl Average: 0.068675 Maximum: 0.967685 Minimum: 0.026789 Variance: 0.015061 Std Dev: 0.122721

SNAPTimes.pl

Sel-J Tss avg.:

0.0012861550696062019

Sel-J Tns avg.:

0.00040214512930619652

Sel-J Tnr avg.:

0.00071015904567164607

Sel-J Trs avg.:

0.0001843658052531819

Sel-J NIU avg.:

0.001148854870765533

Sel-J Tgs avg.: 0 Sel-J Tgr avg.: 0

DCUAccuracy j15may.013.dat.g

g15may.013.dat.ownship Average: 0.786387872657 Stdev: 0.887728095055 Max: 4.858408451080 Min: 0.091292992234

DCUAccuracy g15may.013.dat.j

j15may.013.dat.ownship Average: 1.226194340683 Stdev: 1.018732547760 Max: 4.848147869110 Min: 0.067230947316

SNAPAccuracy

../DCU/j15may.014.dat.1j

e211t3dl.dat.digi1J

Comparing: ../DCU/j15may.014.dat.1j

with e211t3dl.dat.digi1J Average: 0.186631174597 Stdev: 0.164391815662 Max: 2.957400083542 Min: 0.000000000000

SNAPAccuracy

../DCU/j15may.014.dat.2j

e211t3dl.dat.digi2J

Comparing: ../DCU/j15may.014.dat.2j

with e211t3dl.dat.digi2J Average: 0.186631174597 Stdev: 0.164391815662 Max: 2.957400083542 Min: 0.0000000000000

SNAPAccuracy

../DCU/j15may.014.dat.3j

e211t3dl.dat.digi3J

Comparing: ../DCU/j15may.014.dat.3j

with e211t3dl.dat.digi3J Average: 2.971230363327

7-79

Stdev: 2.827747821808 Max : 6.038000106812 Min : 0.000600000028

SNAPAccuracy

../DCU/j15may.014.dat.1g e211t3dl.dat.digi1G

Comparing: ../DCU/j15may.014.dat.1g

with e211t3dl.dat.digi1G Average: 17.820483917143 Stdev: 0.107686527073 Max : 18.027599334717 Min: 17.615999221802

SNAPAccuracy

../DCU/j15may.014.dat.2q e211t3dl.dat.digi2G

Comparing: ../DCU/j15may.014.dat.2g

with e211t3dl.dat.digi2G Average: 17.820848047129 Stdev: 0.107880033553 Max : 18.027599334717 Min: 17.615999221802

SNAPAccuracy

../DCU/j15may.014.dat.3g e211t3dl.dat.digi3G

Comparing: ../DCU/j15may.014.dat.3g

with e211t3dl.dat.digi3G Average: 23.825814712338 Stdev: 0.107175216079 Max : 24.020000457764 Min : 23.628999710083

SNAPAccuracy

../DCU/g15may.014.dat.1j e211t3dl.dat.digi1J

Comparing: ../DCU/g15may.014.dat.1i

with e211t3dl.dat.digi1J Average: 17.820136261760 Stdev: 0.106738992035 Max : 18.017700195312 Min: 17.598999023438

SNAPAccuracy

../DCU/g15may.014.dat.2j

e211t3dl.dat.digi2J

Comparing: ../DCU/g15may.014.dat.2j

with e211t3dl.dat.digi2J Average: 17.819770685056 Stdev: 0.106538638473 Max : 18.017700195312 Min: 17.598999023438

SNAPAccuracy

../DCU/g15may.014.dat.3i

e211t3dl.dat.digi3J

Comparing: ../DCU/g15may.014.dat.3j

with e211t3dl.dat.digi3J

Average:

20.850561428264

Stdev: 3.020683765411 Max : 24.017700195312 Min : 12.000000000000

SNAPAccuracy

../DCU/g15may.014.dat.1g e211t3dl.dat.digi1G

Comparing:

../DCU/g15may.014.dat.1g with e211t3dl.dat.digi1G Average: 0.167528282938 Stdev: 0.105441726744 Max : 0.377999991179 Min : 0.000000000000

SNAPAccuracy

../DCU/g15may.014.dat.2g e211t3dl.dat.diqi2G

Comparing:

../DCU/g15may.014.dat.2g with e211t3dl.dat.digi2G Average: 0.167528282938 Stdev: 0.105441726744 Max : 0.377999991179 Min : 0.00000000000

SNAPAccuracy

../DCU/g15may.014.dat.3g e211t3dl.dat.digi3G Comparing:

../DCU/g15may.014.dat.3g with e211t3dl.dat.digi3G Average: 2.959081825923 Stdev: 2.816118717194 Max : 6.005000114441 Min : 0.000000000000

7.3.15 Stats.015

/usr1/figd/DIS2.2/dis_lite3.

stats

Frames: 503

Average: 0.00147916 Maximum: 0.011483 2nd Max: 0.005537 Minimum: 0.000494

RateErr: 0

/usr1/figd/DIS2.2/dis lite4.

stats

Frames: 503

Average: 0.00141644 Maximum: 0.011286

2nd Max: 0.005438 Minimum: 0.000494

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 500 Count: 488 Average: 1915.89 Maximum: 3424.66 2nd Max: 3389.83 Minimum: -710.227

Frames: 152492 Average: 0.000207904 Maximum: 0.010791 2nd Max: 0.010198 Minimum: 9.5e-05

PDUs from Net1: 484 PDUs from Net2: 500

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 484 Average: 0.0456886 Variance: 0.000100697 Maximum: 0.077708 2nd Max: 0.073754 Minimum: 0.02096

-- End Stats from CircularBuffer ---

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 500 Average: 0.0448286 Variance: 9.67233e-05 Maximum: 0,076424 2nd Max: 0.068134 Minimum: 0.005931

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.080620 Maximum: 2.338966 Minimum: 0.000015 Variance: 0.016829 Std Dev: 0.129726

SNAPTimes.pl Sel-J Tss avg.:

0.0014034890655871845

Sel-J Tns avg.:

0.00039741749530456771

Sel-J Tnr avg.:

0.00098168588459013112

Sel-J Trs avg.:

0.00018536978140350701

Sel-J NIU avg.:

0.0014192007952486627

Sel-J Tgs avg.: 0 Sel-J Tgr avg.: 0

DCUAccuracy j15may.015.dat.g

g15may.015.dat.ownship Average: 8.290723930585 Stdev : 16.061223983765 Max : 51.914707183838 Min : 0.034923259169

DCUAccuracy g15may.015.dat.j

j15may.015.dat.ownship Average: 12.208181073679 Stdev: 17.726932525635 Max: 51.805953979492 Min: 0.077006496489

SNAPAccuracy

../DCU/j15may.015.dat.1j e221t3dl.dat.digi1J

Comparing: ../DCU/j15may.015.dat.1j

with e221t3dl.dat.digi1J Average: 2.567289578798 Stdev : 2.794900417328 Max : 6.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/j15may.015.dat.2j e221t3dl.dat.digi2J

Comparing: ../DCU/j15may.015.dat.2j

with e221t3dl.dat.digi2J Average: 2.575697376778 Stdev: 2.787601470947 Max: 6.0000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/j15may.015.dat.3j e221t3dl.dat.digi3J

Comparing: ../DCU/j15may.015.dat.3j

with e221t3dl.dat.digi3J Average: 8.256216615619 Stdev: 2.298949956894 Max: 33.360149383545 Min: 1.450623989105

SNAPAccuracy

../DCU/j15may.015.dat.1g e221t3dl.dat.digi1G

Comparing: ../DCU/j15may.015.dat.1g

with e221t3dl.dat.digi1G Average: 16.578358328760 Stdev: 4.566649913788 Max: 24.000000000000 Min: 0.063120000064 **SNAPAccuracy**

../DCU/j15may.015.dat.2g e221t3dl.dat.digi2G

Comparing:

../DCU/j15may.015.dat.2g with e221t3dl.dat.digi2G

Average:

19.137104672877

Stdev: 5.924844264984 Max: 30.000000000000 Min: 0.168200001121

SNAPAccuracy

../DCU/j15may.015.dat.3g

e221t3dl.dat.digi3G

Comparing:

../DCU/j15may.015.dat.3g with e221t3dl.dat.digi3G

Average:

17.342467007240

Stdev: 6.297626972198 Max: 83.440536499023 Min: 2.758148193359

SNAPAccuracy

../DCU/g15may.015.dat.1j e221t3dl.dat.digi1J

Comparing:

../DCU/g15may.015.dat.1j with e221t3dl.dat.digi1J

Average:

19.141216889446

Stdev: 5.953764915466 Max: 30.000000000000 Min: 0.001000000047

SNAPAccuracy

../DCU/g15may.015.dat.2j e221t3dl.dat.digi2J

Comparing:

../DCU/g15may.015.dat.2j with e221t3dl.dat.digi2J

Average:

19.160668529388

Stdev: 5.904709815979 Max: 30.000000000000 Min: 0.238399997354

SNAPAccuracy

../DCU/g15may.015.dat.3j e221t3dl.dat.digi3J

Comparing:

../DCU/g15may.015.dat.3j with e221t3dl.dat.digi3J

Average:

17.408726387043

Stdev: 6.043975353241 Max: 67.480743408203 Min: 2.189434051514 **SNAPAccuracy**

../DCU/g15may.015.dat.1g

e221t3dl.dat.digi1G

Comparing: ../DCU/g15may.015.dat.1g

with e221t3dl.dat.digi1G Average: 2.572141742592 Stdev: 2.822868108749 Max: 6.060999870300 Min: 0.0000000000000

SNAPAccuracy

../DCU/g15may.015.dat.2g

e221t3dl.dat.digi2G

Comparing: ../DCU/g15may.015.dat.2g

with e221t3dl.dat.digi2G Average: 2.589109940834 Stdev: 2.807713985443 Max: 6.060999870300 Min: 0.0000000000000

SNAPAccuracy

../DCU/g15may.015.dat.3g

e221t3dl.dat.digi3G

Comparing: ../DCU/g15may.015.dat.3g

with e221t3dl.dat.digi3G Average: 8.074942569742 Stdev: 2.032534837723 Max: 17.729412078857 Min: 1.528562664986

7.3.16 Stats.016

/usr1/figd/DIS2.2/dis_lite3.stats

Frames: 500

Average: 0.00173782 Maximum: 0.00613 2nd Max: 0.002077 Minimum: 0.000493

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 501

Average: 0.0015623 Maximum: 0.006921 2nd Max: 0.001384 Minimum: 0.000493

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 956 Count: 842 Average: 2085.38 Maximum: 10526.3 2nd Max: 3378.38 Minimum: -3278.69

Frames: 220729 Average: 0.000216216 Maximum: 0.01089 2nd Max: 0.010198 Minimum: 8.9e-05

PDUs from Net1: 939 PDUs from Net2: 956

PDU Buffer 1

-- Stats from CircularBuffer --NumPass: 939 Average: 0.0451529 Variance: 0.000104978 Maximum: 0.074941 2nd Max: 0.074447 Minimum: 0.019378

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --NumPass: 956 Average: 0.0453577 Variance: 9.93865e-05 Maximum: 0.079701

2nd Max: 0.07672 Minimum: 0.016807

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.059805 Maximum: 2.283820 Minimum: 0.000015 Variance: 0.011689 Std Dev: 0.108118

SNAPTimes.pl

Sel-J Tss avg.:

0.001325932405618247

Sel-J Tns avg.:

0.00037775745544021126

Sel-J Tnr avg.:

0.0012437693836639828

Sel-J Trs avg.:

0.00018638369788611994

Sel-J NIU avg.:

0.0016606540756516953

Sel-J Tgs avg.: 0 Sel-J Tgr avg.: 0

DCUAccuracy j15may.016.dat.g

g15may.016.dat.ownship Average: 9.176562411335 Stdev : 16.534715652466 Max : 45.702510833740 Min : 0.032016180456 DCUAccuracy g15may.016.dat.j j15may.016.dat.ownship

Average:

11.968989633280

Stdev: 21.207309722900 Max: 54.727542877197 Min: 0.069028981030

SNAPAccuracy

../DCU/j15may.016.dat.1j e231t3dl.dat.digi1J

Comparing:

../DCU/j15may.016.dat.1j with e231t3dl.dat.digi1J Average: 1.116094347793 Stdev : 2.115043163300 Max : 6.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/j15may.016.dat.2j e231t3dl.dat.digi2J Comparing:

../DCU/j15may.016.dat.2j with e231t3dl.dat.digi2J Average: 5.787163657371 Stdev: 2.348792076111 Max: 23.056493759155

Min : 0.580304265022

SNAPAccuracy

../DCU/j15may.016.dat.3j e231t3dl.dat.digi3J

Comparing:

../DCU/j15may.016.dat.3j with e231t3dl.dat.digi3J Average: 7.983751814052 Stdev: 2.078298807144

Max : 23.056474685669 Min : 0.580304265022

SNAPAccuracy

../DCU/j15may.016.dat.1g e231t3dl.dat.digi1G Comparing:

../DCU/j15may.016.dat.1g with e231t3dl.dat.digi1G Average: 8.006736522846 Stdev: 5.464716911316 Max: 12.027600288391 Min: 0.048000000417

SNAPAccuracy

../DCU/j15may.016.dat.2g e231t3dl.dat.digi2G

Comparing:

../DCU/j15may.016.dat.2g with e231t3dl.dat.digi2G

Average: 17.450192554002 Stdev: 6.099874019623 Max: 50.369430541992 Min: 3.206861495972

SNAPAccuracy

../DCU/j15may.016.dat.3g e231t3dl.dat.digi3G

Comparing: ../DCU/j15may.016.dat.3g

with e231t3dl.dat.digi3G Average: 17.838384454197 Stdev: 5.821475505829 Max: 50.270069122314 Min: 2.919278144836

SNAPAccuracy

../DCU/g15may.016.dat.1j e231t3dl.dat.digi1J

Comparing: ../DCU/g15may.016.dat.1j

with e231t3dl.dat.digi1J Average: 12.990788456796 Stdev: 9.217350959778 Max: 24.067998886108 Min: 0.001000000047

SNAPAccuracy

../DCU/g15may.016.dat.2j

e231t3dl.dat.digi2J

Comparing: ../DCU/g15may.016.dat.2j

with e231t3dl.dat.digi2J Average: 17.569445929227 Stdev: 6.056021213531 Max: 54.404739379883 Min: 2.663224458694

SNAPAccuracy

../DCU/g15may.016.dat.3j

e231t3dl.dat.digi3J

Comparing: ../DCU/g15may.016.dat.3j

with e231t3dl.dat.digi3J Average: 17.950461288011 Stdev: 6.109609127045 Max: 57.618061065674 Min: 2.990887641907

SNAPAccuracy

../DCU/g15may.016.dat.1g

e231t3dl.dat.digi1G

Comparing: ../DCU/g15may.016.dat.1g

with e231t3dl.dat.digi1G Average: 1.101618182042 Stdev: 2.126287698746 Max: 6.035000324249 Min: 0.0000000000000

SNAPAccuracy

../DCU/g15may.016.dat.2g

e231t3dl.dat.digi2G

Comparing: ../DCU/g15may.016.dat.2g

with e231t3dl.dat.digi2G Average: 5.723006671125 Stdev: 2.321354389191 Max: 23.056474685669 Min: 0.580304265022

SNAPAccuracy

../DCU/g15may.016.dat.3g

e231t3dl.dat.digi3G

Comparing: ../DCU/g15may.016.dat.3g

with e231t3dl.dat.digi3G Average: 8.026803563580 Stdev: 2.044434070587 Max: 23.056474685669 Min: 0.580304265022

7.3.17 Stats.017

/usr1/figd/DIS2.2/dis_lite3.stats

Frames: 503

Average: 0.00193604 Maximum: 0.006723 2nd Max: 0.001681 Minimum: 0.000494

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 503

Average: 0.00180773 Maximum: 0.00613 2nd Max: 0.001681 Minimum: 0.000495

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 1426 Count: 1136 Average: 2087.03 Maximum: 5076.14 2nd Max: 3378.38 Minimum: -1976.28

Frames: 491069 Average: 0.000208019 Maximum: 0.012372 2nd Max: 0.010297 Minimum: 8e-06

PDUs from Net1: 1409 PDUs from Net2: 1426

PDU Buffer 1

-- Stats from
CircularBuffer -NumPass: 1409
Average: 0.0450976
Variance: 9.45652e-05

Maximum: 0.07504 2nd Max: 0.07326 Minimum: 0.017796

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from

CircularBuffer --

NumPass: 1426 Average: 0.0455693 Variance: 0.000108041 Maximum: 0.078005 2nd Max: 0.073259 Minimum: 0.016808

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.055153 Maximum: 2.319250 Minimum: 0.000016 Variance: 0.006671 Std Dev: 0.081674

SNAPTimes.pl Sel-J Tss avg.:

0.0013353697812461497

Sel-J Tns avg.:

0.00038942942359007036

Sel-J Tnr avg.:

0.0014379662026901855

Sel-J Trs avg.:

0.0004029502982176955

Sel-J NIU avg.:

0.001863159045719849

Sel-J Tgs avg.: 0 Sel-J Tgr avg.: 0

DCUAccuracy i15may.017.dat.g

g15may.017.dat.ownship Average: 8.146849438337 Stdev: 18.501296997070 Max: 89.735832214355

Min : 0.039458338171

DCUAccuracy g15may.017.dat.j j15may.017.dat.ownship Average:

11.849045771496

Stdev: 18.365348815918 Max: 55.991348266602 Min: 0.068600289524

SNAPAccuracy

../DCU/j15may.017.dat.1j

e241t3dl.dat.digi1J

Comparing: ../DCU/j15may.017.dat.1j

with e241t3dl.dat.digi1J Average: 5.711596907507 Stdev: 2.265382766724 Max: 17.268442153931 Min: 0.580298841000

SNAPAccuracy

../DCU/j15may.017.dat.2j

e241t3dl.dat.digi2J

Comparing: ../DCU/j15may.017.dat.2j

with e241t3dl.dat.digi2J Average: 5.859884720416 Stdev: 2.295848131180 Max: 18.325374603271 Min: 0.580304265022

SNAPAccuracy

../DCU/j15may.017.dat.3j

e241t3dl.dat.digi3J

Comparing: ../DCU/j15may.017.dat.3j

with e241t3dl.dat.digi3J Average: 8.176962140347 Stdev: 1.926513075829 Max: 20.607931137085 Min: 0.580304265022

SNAPAccuracy

../DCU/j15may.017.dat.1g

e241t3dl.dat.digi1G

Comparing: ../DCU/j15may.017.dat.1g

with e241t3dl.dat.digi1G Average: 17.133226162509 Stdev: 5.852202415466 Max: 50.333087921143 Min: 2.645166397095

SNAPAccuracy

../DCU/j15may.017.dat.2g

e241t3dl.dat.digi2G

Comparing: ../DCU/j15may.017.dat.2g

with e241t3dl.dat.digi2G Average: 17.816896749075 Stdev: 7.429250717163 Max: 67.025848388672 Min: 3.386588335037

SNAPAccuracy

../DCU/j15may.017.dat.3g

e241t3dl.dat.digi3G

Comparing: ../DCU/j15may.017.dat.3g

with e241t3dl.dat.digi3G Average: 17.853122664272 Stdev: 5.696682453156 Max : 50.274219512939 Min : 3.352034091949

SNAPAccuracy ../DCU/g15may.017.dat.1j e241t3dl.dat.digi1J

Comparing: ../DCU/g15may.017.dat.1j

with e241t3dl.dat.digi1J Average: 17.487487016419 Stdev: 7.079207420349 Max: 66.963478088379 Min: 2.637715578079

SNAPAccuracy ../DCU/g15may.017.dat.2j e241t3dl.dat.digi2J

Comparing: ../DCU/g15may.017.dat.2j

with e241t3dl.dat.digi2J Average: 17.261907044210 Stdev: 5.830834865570 Max: 50.280200958252 Min: 2.313444375992

SNAPAccuracy ../DCU/g15may.017.dat.3j

e241t3dl.dat.digi3J

Comparing: ../DCU/g15may.017.dat.3j

with e241t3dl.dat.digi3J Average: 17.908593215440 Stdev: 6.049585342407 Max: 50.369430541992 Min: 3.922591686249

SNAPAccuracy

../DCU/g15may.017.dat.1g e241t3dl.dat.digi1G

Comparing: ../DCU/g15may.017.dat.1g

with e241t3dl.dat.digi1G Average: 5.682184065542 Stdev: 2.354080438614 Max: 18.836788177490 Min: 0.580318868160

SNAPAccuracy

../DCU/g15may.017.dat.2g e241t3dl.dat.digi2G

Comparing: ../DCU/g15may.017.dat.2g

with e241t3dl.dat.digi2G Average: 5.868035463316 Stdev: 2.384321451187 Max: 19.793291091919 Min: 0.580304265022

SNAPAccuracy

../DCU/g15may.017.dat.3g e241t3dl.dat.digi3G

ez-riodi.dat.digioO

Comparing: ../DCU/g15may.017.dat.3g

with e241t3dl.dat.digi3G Average: 8.220181719190 Stdev: 1.972406625748 Max: 20.700769424438 Min: 0.580304265022

7.3.18 Stats.018

/usr1/figd/DIS2.2/dis4.stats

Frames: 502

Average: 0.00252053 Maximum: 0.012373 2nd Max: 0.009096 Minimum: 0.001285

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 502 Average: 0.0025403 Maximum: 0.012373

2nd Max: 0.012373 Minimum: 0.001482

RateErr: 0

/sg16/usr1/nets/GATEWA

Y/gateway1.stats Frames : 502

Average: 0.00182069 Maximum: 0.011582 2nd Max: 0.011568 Minimum: 0.000396

/sg16/usr1/nets/GATEWA

Y/gateway2.stats Frames : 502

Average: 0.00182886 Maximum: 0.011681 2nd Max: 0.009195 Minimum: 0.000396

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs : 29 Count : 25 Average: 1592.3 Maximum: 2531.65 2nd Max: 2525.25 Minimum: 1011.12

Frames: 611614 Average: 0.000231277 Maximum: 0.010298 2nd Max: 0.010297 Minimum: 8.9e-05 PDUs from Net1: 19 PDUs from Net2: 29

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 19 Average: 0.0500942 Variance: 0.000112852 Maximum: 0.063967 2nd Max: 0.060506 Minimum: 0.032626

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 29 Average: 0.043072 Variance: 9.08956e-05 Maximum: 0.063472 2nd Max: 0.057343 Minimum: 0.026002

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.203521 Maximum: 2.807503 Minimum: 0.000236 Variance: 0.228151 Std Dev: 0.477651

SNAPTimes.pl e212t0.dat

Sel-J Tss avg.:

0.0013506918488636014

Sel-J Tns avg.:

0.00093208151083383115

Sel-J Tnr avg.:

0.0014492326044061158

Sel-J Trs avg.:

0.000404530815260807

Sel-J NIU avg.:

0.0024139542742841785

Sel-J Nius avg.:

0.00093208151083383115

Sel-J Niur avg.:

0.0014492326044061158

Sel-J Tgs avg.:

0.00079494632211956793

Sel-J Tgr avg.:

0.00040866799196520001

DCUAccuracy j15may.018.dat.g g15may.018.dat.ownship Average: 14.413228370641 Stdev: 1.715261578560 Max: 16.288682937622 Min: 0.434768944979

DCUAccuracy g15may.018.dat.j j15may.018.dat.ownship

Average: 13.442909880626 Stdev: 1.381719708443 Max: 14.216148376465 Min: 0.161987662315

SNAPAccuracy

../DCU/j15may.018.dat.1j

e212t0.dat.digi1J

Comparing: ../DCU/j15may.018.dat.1j

with e212t0.dat.digi1J Average: 5.925595225942 Stdev: 0.055818248540 Max: 6.120999813080 Min: 4.770200252533

SNAPAccuracy

../DCU/j15may.018.dat.2j

e212t0.dat.digi2J

Comparing: ../DCU/j15may.018.dat.2j

with e212t0.dat.digi2J Average: 6.233124860576 Stdev: 0.055882938206 Max: 6.326000213623 Min: 5.066899776459

SNAPAccuracy

../DCU/j15may.018.dat.3j

e212t0.dat.digi3J

Comparing: ../DCU/j15may.018.dat.3j

with e212t0.dat.digi3J Average: 6.575743073549 Stdev: 0.274435847998 Max: 6.660999774933 Min: 0.611000001431

SNAPAccuracy

../DCU/j15may.018.dat.1g

e212t0.dat.digi1G

Comparing: ../DCU/j15may.018.dat.1g

with e212t0.dat.digi1G Average: 5.686065252870 Stdev: 0.719209134579 Max: 5.945459842682 Min: 0.143999993801

SNAPAccuracy

../DCU/j15may.018.dat.2g

e212t0.dat.digi2G

Comparing: ../DCU/j15may.018.dat.2g

with e212t0.dat.digi2G Average: 6.066217415645 Stdev: 0.759656786919 Max: 6.323999881744 Min: 0.208000004292

SNAPAccuracy

../DCU/j15may.018.dat.3g

e212t0.dat.digi3G

Comparing:

../DCU/j15may.018.dat.3g with e212t0.dat.digi3G Average: 6.389728249210 Stdev: 0.602514863014 Max: 6.636719703674

Min: 0.534000039101

SNAPAccuracy

../DCU/g15may.018.dat.1j e212t0.dat.digi1J

Comparing:

../DCU/g15may.018.dat.1j with e212t0.dat.digi1J Average: 5.792982732968 Stdev: 0.526440978050 Max: 6.030519962311

Min : 0.076000005007

SNAPAccuracy

../DCU/g15may.018.dat.2j

e212t0.dat.digi2J Comparing:

../DCU/g15may.018.dat.2j with e212t0.dat.digi2J Average: 6.075610982724 Stdev: 0.600940704346 Max: 6.323999881744 Min: 0.229000002146

SNAPAccuracy

../DCU/g15may.018.dat.3j

e212t0.dat.digi3J Comparing:

../DCU/g15may.018.dat.3j with e212t0.dat.digi3J Average: 6.439338941157

Stdev: 0.598833024502 Max: 6.712969779968 Min: 0.615000009537

SNAPAccuracy

../DCU/g15may.018.dat.1g e212t0.dat.digi1G

Comparing:

../DCU/g15may.018.dat.1g with e212t0.dat.digi1G Average: 6.000208041078

Stdev: 0.018390018493 Max: 6.059000015259 Min: 5.940000057220

SNAPAccuracy

../DCU/g15may.018.dat.2g e212t0.dat.digi2G

Comparing:

../DCU/g15may.018.dat.2g with e212t0.dat.digi2G Average: 6.368078222217 Stdev : 0.024491876364 Max : 6.453000068665

Min : 6.175000190735

SNAPAccuracy

../DCU/g15may.018.dat.3g

e212t0.dat.digi3G

Comparing: ../DCU/g15may.018.dat.3g

with e212t0.dat.digi3G Average: 6.663376883842 Stdev: 0.270296812057 Max: 6.750000000000 Min: 0.670000016689

7.3.19 Stats.019

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.0026298 Maximum: 0.012951 2nd Max: 0.012357 Minimum: 0.001186

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00269919 Maximum: 0.012769 2nd Max: 0.012557 Minimum: 0.001087

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 503

Average: 0.00297485 Maximum: 0.011469 2nd Max: 0.011271 Minimum: 0.000297

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 503

Average: 0.00308848 Maximum: 0.013841 2nd Max: 0.013461 Minimum: 0.000297

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 489 Count: 456 Average: 1531.02 Maximum: 3378.38 2nd Max: 2525.25 Minimum: -753.239

Frames: 216743 Average: 0.000229794 Maximum: 0.010875 2nd Max: 0.010199 Minimum: 9.5e-05

PDUs from Net1: 478 PDUs from Net2: 489

PDU Buffer 1

 Stats from CircularBuffer --NumPass: 478

Average: 0.0452677 Variance: 9.98683e-05 Maximum: 0.074743 2nd Max: 0.064856 Minimum: 0.011864

-- End Stats from CircularBuffer --

PDU Buffer 2

- Stats from CircularBuffer --

NumPass: 489 Average: 0.0452338 Variance: 9.47299e-05 Maximum: 0.078005 2nd Max: 0.068627 Minimum: 0.016709

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.131496 Maximum: 1.604789 Minimum: 0.000017 Variance: 0.012100 Std Dev: 0.109999

SNAPTimes.pl e222t0.dat

Sel-J Tss avg.:

0.0013648687872158966

Sel-J Tns avg.:

0.00089018886677909705

Sel-J Tnr avg.:

0.0016814373756827608

Sel-J Trs avg.:

0.00040373558636336304

Sel-J NIU avg.:

0.0026010994034924378

Sel-J Nius avg.:

0.00089018886677909705

Sel-J Niur avg.:

0.0016814373756827608

Sel-J Tgs avg.:

0.0013023797218920663

Sel-J Tgr avg.:

0.00098884095415027696

DCUAccuracy j15may.019.dat.g g15may.019.dat.ownship

Average:

14.568547780809

Stdev: 0.982152581215 Max: 17.624677658081 Min: 12.853074073792

DCUAccuracy

g15may.019.dat.j

j15may.019.dat.ownship

Average:

13.585760418348

Stdev: 0.441052019596 Max: 20.118774414062

Min: 13.033267021179

SNAPAccuracy

../DCU/j15may.019.dat.1j

e222t0.dat.digi1J Comparing:

../DCU/j15may.019.dat.1j with e222t0.dat.digi1J

Average: 5.924653525795 Stdev: 0.147156968713 Max: 5.970499992371

Min : 2.677839994431

SNAPAccuracy

../DCU/j15may.019.dat.2j e222t0.dat.digi2J

Comparing:

../DCU/j15may.019.dat.2j with e222t0.dat.digi2J Average: 6.230793860651 Stdev: 0.147722050548

Max : 6.326000213623 Min : 3.004230022430

SNAPAccuracy

../DCU/j15may.019.dat.3j

e222t0.dat.digi3J

Comparing:

../DCU/j15may.019.dat.3j

with e222t0.dat.digi3J

Average:

15.619847326509

Stdev: 2.685892820358 Max: 19.073703765869

Min: 9.431358337402

SNAPAccuracy

../DCU/j15may.019.dat.1g

e222t0.dat.digi1G

Comparing:

../DCU/j15may.019.dat.1g with e222t0.dat.digi1G Average: 5.751894753154 SNAPAccuracy ../DCU/j15may.019.dat.2g e222t0.dat.digi2G

Stdev: 0.107644744217

Max : 5.965070247650

Min : 5.541999816895

Comparing: ../DCU/j15may.019.dat.2g

with e222t0.dat.digi2G Average: 6.092878953228 Stdev: 0.106974430382 Max: 6.291470050812 Min: 5.897999763489

SNAPAccuracy

../DCU/j15may.019.dat.3g

e222t0.dat.digi3G

Comparing: ../DCU/j15may.019.dat.3g

with e222t0.dat.digi3G Average: 27.296760454410 Stdev: 3.759417295456 Max: 40.467304229736 Min: 18.657518386841

SNAPAccuracy

../DCU/g15may.019.dat.1j

e222t0.dat.digi1J

Comparing: ../DCU/g15may.019.dat.1j

with e222t0.dat.digi1J Average: 5.655848324178 Stdev: 0.213090568781 Max: 6.036220073700 Min: 5.274000167847

SNAPAccuracy

../DCU/q15may.019.dat.2i

e222t0.dat.digi2J

Comparing: ../DCU/g15may.019.dat.2j

with e222t0.dat.digi2J Average: 6.110691388448 Stdev: 0.106045044959 Max: 6.323999881744 Min: 5.916000366211

SNAPAccuracy

../DCU/g15may.019.dat.3j

e222t0.dat.digi3J

Comparing: ../DCU/g15may.019.dat.3j

with e222t0.dat.digi3J Average: 27.575976426709 Stdev: 3.756741762161 Max: 41.806755065918 Min: 19.042139053345

SNAPAccuracy

../DCU/g15may.019.dat.1g

e222t0.dat.digi1G

Comparing: ../DCU/g15may.019.dat.1g

with e222t0.dat.digi1G

Average: 6.012122171506 Stdev: 0.288724958897 Max: 12.038689613342 Min: 3.804739952087

SNAPAccuracy

../DCU/g15may.019.dat.2g

e222t0.dat.digi2G

Comparing: ../DCU/g15may.019.dat.2g

with e222t0.dat.digi2G Average: 6.375283258542 Stdev: 0.287456035614 Max: 12.365089416504 Min: 4.160809993744

SNAPAccuracy

../DCU/g15may.019.dat.3g

e222t0.dat.digi3G

Comparing: ../DCU/g15may.019.dat.3g

with e222t0.dat.digi3G Average: 15.821291388161 Stdev : 2.802652120590 Max : 35.308498382568 Min : 10.345519065857

7.3.20 Stats.020

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.00280845 Maximum: 0.012966 2nd Max: 0.008403 Minimum: 0.001285

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00275886 Maximum: 0.01267 2nd Max: 0.008601 Minimum: 0.001482

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 503

Average: 0.00413939 Maximum: 0.015126 2nd Max: 0.014336 Minimum: 0.000394

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 503

Average: 0.00391853 Maximum: 0.016511 2nd Max: 0.015028 Minimum: 0.000295

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs: 943 Count: 750 Average: 1643.02 Maximum: 3378.38 2nd Max: 2531.65 Minimum: -900.901

Frames: 146074 Average: 0.000236868 Maximum: 0.018686 2nd Max: 0.012557 Minimum: 9.5e-05

PDUs from Net1: 934 PDUs from Net2: 943

PDU Buffer 1
-- Stats from
CircularBuffer -NumPass: 934
Average: 0.0447339
Variance: 0.000102625
Maximum: 0.072765
2nd Max: 0.070888
Minimum: 0.016115
-- End Stats from

CircularBuffer --

PDU Buffer 2
-- Stats from
CircularBuffer -NumPass: 943
Average: 0.045138
Variance: 0.000101338
Maximum: 0.077018
2nd Max: 0.074347
Minimum: 0.017302
-- End Stats from

SNAPPdus.pl Average: 0.091841 Maximum: 1.196384 Minimum: 0.000019 Variance: 0.002951 Std Dev: 0.054324

CircularBuffer ---

SNAPTimes.pl e232t0.dat Sel-J Tss avg.: 0.0013297037774348394 Sel-J Tns avg.:

Sel-J Ths avg..

0.00092124453291056723

Sel-J Tnr avg.:

0.0017155785290105454

Sel-J Trs avg.:

0.0005497495028390281

Sel-J NIU avg.:

0.0026747455269638238

Sel-J Nius avg.:

0.00092124453291056723

Sel-J Niur avg.:

0.0017155785290105454

Sel-J Tgs avg.:

0.0019236719683184155

Sel-J Tgr avg.:

0.0014786660038471726

DCUAccuracy j15may.020.dat.g g15may.020.dat.ownship Average: 14.523556964118 Stdev: 0.958902180195 Max: 16.155984878540

Min : 12.762355804443

DCUAccuracy g15may.020.dat.j

j15may.020.dat.ownship Average: 13.577004774379 Stdev: 0.305462718010 Max: 14.164163589478 Min: 13.056470870972

SNAPAccuracy

../DCU/j15may.020.dat.1j

e232t0.dat.digi1J

Comparing: ../DCU/j15may.020.dat.1j

with e232t0.dat.digi1J Average: 5.929741548580 Stdev: 0.022084238008 Max: 6.151000022888 Min: 5.880700111389

SNAPAccuracy

../DCU/j15may.020.dat.2j

e232t0.dat.digi2J

Comparing: ../DCU/j15may.020.dat.2j

with e232t0.dat.digi2J Average: 14.504122893335 Stdev: 2.703833103180 Max: 18.256290435791 Min: 9.574209213257

SNAPAccuracy

../DCU/j15may.020.dat.3j

e232t0.dat.digi3J

Comparing: ../DCU/j15may.020.dat.3j

with e232t0.dat.digi3J Average: 15.817062406713 Stdev: 2.721836566925 Max: 19.281951904297 Min: 10.141779899597

../DCU/j15may.020.dat.1g

e232t0.dat.digi1G

Comparing: ../DCU/j15may.020.dat.1g

with e232t0.dat.digi1G Average: 5.574042799019 Stdev: 0.212058588862 Max: 5.966149806976 Min: 5.184999942780

SNAPAccuracy

../DCU/j15may.020.dat.2g

e232t0.dat.digi2G

Comparing: ../DCU/j15may.020.dat.2g

with e232t0.dat.digi2G Average: 26.144706594799 Stdev: 4.138270378113 Max: 38.013381958008 Min: 17.030647277832

SNAPAccuracy

../DCU/j15may.020.dat.3g

e232t0.dat.digi3G

Comparing: ../DCU/j15may.020.dat.3g

with e232t0.dat.digi3G Average: 27.852497870049 Stdev: 4.059389114380 Max: 38.167846679688 Min: 17.971961975098

SNAPAccuracy

../DCU/g15may.020.dat.1j

e232t0.dat.digi1J

Comparing: ../DCU/g15may.020.dat.1j

with e232t0.dat.digi1J Average: 5.814852819210 Stdev: 0.106720983982 Max: 6.037300109863 Min: 5.605000019073

SNAPAccuracy

../DCU/g15may.020.dat.2j

e232t0.dat.digi2J

Comparing: ../DCU/g15may.020.dat.2j

with e232t0.dat.digi2J Average: 26.126119210468 Stdev: 4.164890766144 Max: 41.913150787354 Min: 16.171922683716

SNAPAccuracy

../DCU/g15may.020.dat.3j

e232t0.dat.digi3J

Comparing: ../DCU/g15may.020.dat.3j

with e232t0.dat.digi3J Average: 27.929720285462 Stdev: 4.121520042419 Max: 42.266094207764 Min: 18.982746124268 **SNAPAccuracy**

../DCU/g15may.020.dat.1g

e232t0.dat.digi1G Comparing:

../DCU/g15may.020.dat.1g with e232t0.dat.digi1G Average: 6.002285615779

Stdev: 0.022540187463 Max: 6.239999771118 Min: 5.940000057220

SNAPAccuracy

../DCU/g15may.020.dat.2g

e232t0.dat.digi2G

Comparing:

../DCU/g15may.020.dat.2g

with e232t0.dat.digi2G

Average:

14.648600206049

Stdev: 2.745327711105 Max: 18.410047531128 Min: 9.700459480286

SNAPAccuracy

../DCU/g15may.020.dat.3g

e232t0.dat.digi3G

Comparing:

../DCU/g15may.020.dat.3g

with e232t0.dat.digi3G

Average:

15.946655501782

Stdev: 2.771196842194 Max: 19.437074661255 Min: 10.268972396851

7.3.21 Stats.021

/usr1/figd/DIS2.2/dis4.stats

Frames: 500

Average: 0.00278255 Maximum: 0.012966 2nd Max: 0.00702 Minimum: 0.001385

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 500

Average: 0.00280073 Maximum: 0.012472 2nd Max: 0.010183 Minimum: 0.001186

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 500

Average: 0.00524231 Maximum: 0.017599 2nd Max: 0.011568 Minimum: 0.000395

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 500

Average: 0.00509046 Maximum: 0.01394 2nd Max: 0.008206 Minimum: 0.000297

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 1395 Count: 886 Average: 1604.24 Maximum: 3378.38 2nd Max: 3378.38 Minimum: -853

Frames: 396294 Average: 0.000395767 Maximum: 60.0002 2nd Max: 0.010297 Minimum: 9e-05

PDUs from Net1: 1392 PDUs from Net2: 1395

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 1392 Average: 0.0454465 Variance: 9.44701e-05 Maximum: 0.082059 2nd Max: 0.074842 Minimum: 0.014632

- End Stats from CircularBuffer -

PDU Buffer 2

- Stats from CircularBuffer --

NumPass: 1395 Average: 0.0462739 Variance: 0.000106229 Maximum: 0.079686 2nd Max: 0.072766 Minimum: 0.012457

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.074827 Maximum: 1.580124 Minimum: 0.000019 Variance: 0.006831 Std Dev: 0.082653 SNAPTimes.pl e242t0.dat

Sel-J Tss avg.:

0.001360721669962239

Sel-J Tns avg.:

0.0010366163021367817

Sel-J Tnr avg.:

0.0016636540755824182

Sel-J Trs avg.:

0.0004035009939688032

Sel-J NIU avg.:

0.0026956898608755516

Sel-J Nius avg.:

0.0010366163021367817

Sel-J Niur avg.:

0.0016636540755824182

Sel-J Tgs avg.:

0.0024827335984509754

Sel-J Tgr avg.:

0.0019805248507988689

DCUAccuracy j15may.021.dat.g

g15may.021.dat.ownship

Average: 14.522386799940

Stdev: 0.964062273502 Max : 16.237604141235

Min : 12.817463874817

DCUAccuracy g15may.021.dat.j

j15may.021.dat.ownship

Average: 13.592695958219

Stdev: 0.318473726511

Max : 14.198465347290 Min : 13.073492050171

SNAPAccuracy

../DCU/j15may.021.dat.1j

e242t0.dat.digi1J

Comparing: ../DCU/j15may.021.dat.1j

with e242t0.dat.digi1J

Average: 13.313380922590

Stdev: 2.603532552719

Max : 17.188470840454

Min: 9.048884391785

SNAPAccuracy

../DCU/j15may.021.dat.2j

e242t0.dat.digi2J

Comparing: ../DCU/j15may.021.dat.2j

with e242t0.dat.digi2J

Average: 14.340358853100

Stdev: 2.741908311844

Max: 18.266439437866

Min : 9.628337860107

SNAPAccuracy

../DCU/j15may.021.dat.3j

e242t0.dat.digi3J

Comparing:

../DCU/j15may.021.dat.3j with e242t0.dat.digi3J

Average:

15.831007483500

Stdev: 2.779477596283

Max : 19.395149230957

Min: 10.090507507324

SNAPAccuracy

../DCU/i15may.021.dat.1q

e242t0.dat.digi1G

Comparing:

../DCU/j15may.021.dat.1g

with e242t0.dat.digi1G

Average:

24.226825752879

Stdev: 3.549357652664

Max : 33.757812500000

Min: 16.315990447998

SNAPAccuracy

../DCU/j15may.021.dat.2g

e242t0.dat.digi2G

Comparing:

../DCU/j15may.021.dat.2g

with e242t0.dat.digi2G

Average:

25.165426799782

Stdev: 3.771032810211

Max: 40.345554351807

Min : 16.734685897827

SNAPAccuracy

../DCU/j15may.021.dat.3g

e242t0.dat.digi3G

Comparing:

../DCU/j15may.021.dat.3g with e242t0.dat.digi3G

Average:

27.613613318622

Stdev: 4.115356445312

Max: 40.656246185303

Min: 17.089523315430

SNAPAccuracy

../DCU/g15may.021.dat.1j

e242t0.dat.digi1J

Comparing:

../DCU/q15may.021.dat.1j

with e242t0.dat.digi1J

Average:

24.063446660071

Stdev: 3.408329010010

Max: 33.819667816162

Min: 16.851316452026

SNAPAccuracy

../DCU/q15may.021.dat.2j

e242t0.dat.digi2J

Comparing: ../DCU/g15may.021.dat.2j

with e242t0.dat.digi2J

Average: 25.138127160513

Stdev: 3.583865880966

Max: 38.125892639160

Min: 16.949481964111

SNAPAccuracy

../DCU/g15may.021.dat.3j

e242t0.dat.digi3J

Comparing: ../DCU/g15may.021.dat.3j

with e242t0.dat.digi3J

Average: 27.312400233673

Stdev: 3.853420734406

Max: 38.150466918945

Min: 18.941118240356

SNAPAccuracy

../DCU/g15may.021.dat.1g

e242t0.dat.digi1G

Comparing: ../DCU/g15may.021.dat.1g

with e242t0.dat.digi1G

Average: 13.467054566627

Stdev: 2.642156362534 Max : 17.410043716431

Min: 9.141060829163

SNAPAccuracy

../DCU/g15may.021.dat.2g

e242t0.dat.digi2G

Comparing: ../DCU/g15may.021.dat.2g

with e242t0.dat.digi2G

Average: 14.517063363457

Stdev: 2.774024724960

Max: 18.511789321899 Min: 9.754666328430

SNAPAccuracy

../DCU/g15may.021.dat.3g

e242t0.dat.digi3G

Comparing: ../DCU/g15may.021.dat.3g

with e242t0.dat.digi3G

Average: 16.011156947560

Stdev: 2.820307731628

Max : 19.519573211670

Min: 10.300285339355

7.3.22 Stats.022

/usr1/figd/DIS2.2/dis lite3.stats

Frames: 503

Average: 0.00257029

Maximum: 0.012669 2nd Max: 0.008602 Minimum: 0.00168

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 503 Average: 0.00271991 Maximum: 0.010183 2nd Max: 0.00168 Minimum: 0.00168

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway_lit

e2.stats

Frames: 503

Average: 0.00249027 Maximum: 0.013262 2nd Max: 0.010875 Minimum: 0.000296

/sg16/usr1/nets/GATEWAY/gateway_lit

e1.stats Frames : 503

Average: 0.00267815 Maximum: 0.014731 2nd Max: 0.000296 Minimum: 0.000296

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 54 Count : 48 Average: 1549.73 Maximum: 2531.65 2nd Max: 2247.19 Minimum: 1011.12

Frames: 242146 Average: 0.000230465 Maximum: 0.010791 2nd Max: 0.010298 Minimum: 8e-06

PDUs from Net1: 168 PDUs from Net2: 54

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 168 Average: 0.046705 Variance: 0.00010538 Maximum: 0.069503 2nd Max: 0.06891 Minimum: 0.02086

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 54

Average: 0.0440963
Variance: 0.000101687
Maximum: 0.064758
2nd Max: 0.061198
Minimum: 0.022146
-- End Stats from
CircularBuffer --

SNAPPdus.pl

Average: 0.126371 Maximum: 1.206465 Minimum: 0.000006 Variance: 0.028565 Std Dev: 0.169012

SNAPTimes.pl e212t0l.dat

Sel-J Tss avg.:

0.0013412783300302965

Sel-J Tns avg.:

0.0012845884691121911

Sel-J Tnr avg.:

0.0011746441352594955

Sel-J Trs avg.:

0.00039940556673813058

Sel-J NIU avg.:

0.0024936381710041035

Sel-J Nius avg.:

0.0012845884691121911

Sel-J Niur avg.:

0.0011746441352594955

Sel-J Tgs avg.:

0.0013371888666836569

Sel-J Tgr avg.:

0.00071167594437403182

DCUAccuracy j15may.022.dat.g

g15may.022.dat.ownship

Average:

29.004884789347

Stdev: 29.022920608521 Max: 91.725677490234 Min: 12.986244201660

DCUAccuracy g15may.022.dat.j j15may.022.dat.ownship

Average:

32.757679418031

Stdev: 30.372009277344 Max: 82.593605041504 Min: 13.145195007324

SNAPAccuracy

../DCU/j15may.022.dat.1j e212t0l.dat.digi1J

Comparing:

../DCU/j15may.022.dat.1j with e212t0l.dat.digi1J Average: 5.941145612533 Stdev: 0.272501409054 Max: 12.000000000000 Min: 5.880800247192

SNAPAccuracy

../DCU/j15may.022.dat.2j

e212t0l.dat.digi2J

Comparing: ../DCU/j15may.022.dat.2j

with e212t0l.dat.digi2J Average: 6.307448504919 Stdev: 0.259233325720 Max: 12.000000000000 Min: 6.0000000000000

SNAPAccuracy

../DCU/j15may.022.dat.3j

e212t0l.dat.digi3J

Comparing: ../DCU/j15may.022.dat.3j

with e212t0l.dat.digi3J Average: 6.617476956465 Stdev: 0.248189613223 Max: 12.000000000000 Min: 6.0000000000000

SNAPAccuracy

../DCU/j15may.022.dat.1g

e212t0l.dat.digi1G

Comparing: ../DCU/j15may.022.dat.1g

with e212t0l.dat.digi1G Average: 23.827763626933 Stdev: 0.297965914011 Max: 30.000000000000 Min: 23.614000320435

SNAPAccuracy

../DCU/j15may.022.dat.2g

e212t0l.dat.digi2G

Comparing: ../DCU/j15may.022.dat.2g

with e212t0l.dat.digi2G Average: 32.864441776856 Stdev: 3.011962175369 Max: 36.026100158691 Min: 29.606000900269

SNAPAccuracy

../DCU/j15may.022.dat.3g

e212t0l.dat.digi3G

Comparing: ../DCU/j15may.022.dat.3g

with e212t0l.dat.digi3G Average: 32.864441776856 Stdev: 3.011962175369 Max: 36.026100158691 Min: 29.606000900269

SNAPAccuracy

../DCU/g15may.022.dat.1j

e212t0l.dat.digi1J

Comparing: ../DCU/g15may.022.dat.1j

with e212t0l.dat.digi1J Average: 32.878112212640 Stdev: 3.013133049011 Max: 36.057598114014 Min: 29.621999740601

SNAPAccuracy

../DCU/g15may.022.dat.2j

e212t0l.dat.digi2J

Comparing: ../DCU/g15may.022.dat.2j

with e212t0l.dat.digi2J Average: 29.640288854900 Stdev: 0.192024677992 Max: 30.006599426270 Min: 29.277000427246

SNAPAccuracy

../DCU/g15may.022.dat.3j

e212t0l.dat.digi3J

Comparing: ../DCU/g15may.022.dat.3j

with e212t0l.dat.digi3J Average: 29.640288854900 Stdev: 0.192024677992 Max: 30.006599426270 Min: 29.277000427246

SNAPAccuracy

../DCU/g15may.022.dat.1g

e212t0l.dat.digi1G

Comparing: ../DCU/g15may.022.dat.1g

with e212t0l.dat.digi1G Average: 6.002946601814 Stdev: 0.036075793207 Max: 6.682229995728 Min: 5.940000057220

SNAPAccuracy

../DCU/g15may.022.dat.2g

e212t0l.dat.digi2G

Comparing: ../DCU/g15may.022.dat.2g

with e212t0l.dat.digi2G Average: 6.378303118978 Stdev : 0.254752755165 Max : 12.000000000000 Min : 6.000000000000

SNAPAccuracy

../DCU/g15may.022.dat.3g

e212t0l.dat.digi3G

Comparing: ../DCU/g15may.022.dat.3g

with e212t0l.dat.digi3G Average: 6.691670557581 Stdev: 0.244984656572 Max: 12.000000000000 Min: 6.0000000000000

7.3.23 Stats.023

/usr1/figd/DIS2.2/dis_lite3.

stats

Frames: 502

Average: 0.00274016 Maximum: 0.012669 2nd Max: 0.008304 Minimum: 0.001474

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.

stats

Frames: 503

Average: 0.00285402 Maximum: 0.013362 2nd Max: 0.008107 Minimum: 0.001779

RateErr: 0

/sg16/usr1/nets/GATEWA

Y/gateway_lite2.stats

Frames: 503

Average: 0.00371608 Maximum: 0.013955 2nd Max: 0.011469 Minimum: 0.000395

/sg16/usr1/nets/GATEWA Y/gateway lite1.stats

Trgateway_ner.s

Frames: 503

Average: 0.00406218 Maximum: 0.013955 2nd Max: 0.013445 Minimum: 0.000396

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs: 517 Count: 500 Average: 1525.03 Maximum: 5319.15 2nd Max: 3424.66 Minimum: -4784.69

Frames: 636632 Average: 0.000233305 Maximum: 0.01089 2nd Max: 0.010297 Minimum: 9.2e-05

PDUs from Net1: 653 PDUs from Net2: 517

PDU Buffer 1

-- Stats from CircularBuffer -- NumPass: 653

Average: 0.0450133 Variance: 9.67619e-05 Maximum: 0.073161 2nd Max: 0.071678 Minimum: 0.019081

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 517 Average: 0.0460071 Variance: 9.63867e-05 Maximum: 0.074446 2nd Max: 0.070408 Minimum: 0.018785

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.091868 Maximum: 1.596006 Minimum: 0.000008 Variance: 0.010033 Std Dev: 0.100163

SNAPTimes.pl e222t0l.dat

Sel-J Tss avg.:

0.0013411033797451845

Sel-J Tns avg.:

0.0012895924453581932

Sel-J Tnr avg.:

0.0013421590458172388

Sel-J Trs avg.:

0.00040313916509530359

Sel-J NIU avg.:

0.0026696640159581809

Sel-J Nius avg.:

0.0012895924453581932

Sel-J Niur avg.:

0.0013421590458172388

Sel-J Tgs avg.:

0.0020938727634502519

Sel-J Tgr avg.:

0.0013351769382819148

DCUAccuracy j15may.023.dat.g g15may.023.dat.ownship Average: 26.269625969518 Stdev: 26.564994812012 Max: 90.955024719238

Min: 0.522945344448

DCUAccuracy g15may.023.dat.j j15may.023.dat.ownship Average: 32.619275143272

Stdev: 27.729703903198 Max: 82.391418457031 Min: 13.203137397766

../DCU/j15may.023.dat.1j

e222t0l.dat.digi1J

Comparing: ../DCU/j15may.023.dat.1j

with e222t0l.dat.digi1J Average: 5.942021977471 Stdev: 0.287686169147 Max: 11.939999580383 Min: 3.746000051498

SNAPAccuracy

../DCU/j15may.023.dat.2j

e222t0l.dat.digi2J

Comparing: ../DCU/j15may.023.dat.2j

with e222t0l.dat.digi2J Average: 6.352969690499 Stdev: 0.384499877691 Max: 12.355000495911 Min: 4.131000041962

SNAPAccuracy

../DCU/j15may.023.dat.3j

e222t0l.dat.digi3J

Comparing: ../DCU/j15may.023.dat.3j

with e222t0l.dat.digi3J Average: 15.069148407136 Stdev: 3.103371858597 Max: 33.360149383545 Min: 8.742362022400

SNAPAccuracy

../DCU/j15may.023.dat.1g

e222t0l.dat.digi1G

Comparing: ../DCU/j15may.023.dat.1g

with e222t0l.dat.digi1G Average: 29.962720263560 Stdev : 8.323145866394 Max : 36.013801574707 Min : 5.822000026703

SNAPAccuracy

../DCU/j15may.023.dat.2g

e222t0l.dat.digi2G

Comparing: ../DCU/j15may.023.dat.2g

with e222t0l.dat.digi2G Average: 24.629258555439 Stdev : 6.569330692291 Max : 30.022500991821 Min : 6.208000183105

SNAPAccuracy

../DCU/j15may.023.dat.3g

e222t0l.dat.digi3G

Comparing: ../DCU/j15may.023.dat.3g

with e222t0l.dat.digi3G Average: 26.417463514105 Stdev : 4.544729232788 Max : 83.440536499023 Min: 18.998716354370

SNAPAccuracy

../DCU/g15may.023.dat.1j

e222t0l.dat.digi1J

Comparing:

../DCU/g15may.023.dat.1j with e222t0l.dat.digi1J

Average:

24.663765439138

Stdev: 6.557603359222 Max: 36.0000000000000 Min: 5.912000179291

SNAPAccuracy

../DCU/g15may.023.dat.2j

e222t0l.dat.digi2J

Comparing:

../DCU/g15may.023.dat.2j with e222t0l.dat.digi2J

Average:

27.601874741465

Stdev: 6.854535102844 Max: 36.000000000000

Min: 6.296999931335

SNAPAccuracy

../DCU/g15may.023.dat.3j

e222t0l.dat.digi3J

Comparing:

../DCU/g15may.023.dat.3j with e222t0l.dat.digi3J

Average:

26.200210324183

Stdev: 6.509726524353
Max: 67.069793701172
Min: 16.500768661499

SNAPAccuracy

../DCU/g15may.023.dat.1g

e222t0l.dat.digi1G

Comparing:

../DCU/g15may.023.dat.1g with e222t0l.dat.digi1G Average: 6.009597887695 Stdev: 0.027476709336

Max : 6.445079803467 Min : 5.940000057220

SNAPAccuracy

../DCU/g15may.023.dat.2g

e222t0l.dat.digi2G

Comparing:

../DCU/g15may.023.dat.2g with e222t0l.dat.digi2G

Average: 6.423980083504

Stdev: 0.252870112658

SNAPAccuracy

../DCU/g15may.023.dat.3g

e222t0l.dat.digi3G

Comparing: ../DCU/g15may.023.dat.3g

with e222t0l.dat.digi3G Average: 15.743764470521 Stdev: 2.994722604752 Max: 33.360149383545 Min: 9.785840034485

7.3.24 Stats.024

/usr1/figd/DIS2.2/dis lite3.stats

Frames: 503

Average: 0.00282959 Maximum: 0.009196 2nd Max: 0.001482 Minimum: 0.001482

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 503

Average: 0.00296364 Maximum: 0.010084 2nd Max: 0.001878 Minimum: 0.001681

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway_lit

e2.stats

Frames: 503

Average: 0.00522954 Maximum: 0.019279 2nd Max: 0.013545 Minimum: 0.000395

/sg16/usr1/nets/GATEWAY/gateway_lit

e1.stats Frames: 503

Average: 0.00524894 Maximum: 0.016511 2nd Max: 0.016313 Minimum: 0.000296

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 993 Count: 809 Average: 1577.69 Maximum: 11236 2nd Max: 4123.71 Minimum: -2190.58

Frames : 191961 Average: 0.000232647 Maximum: 0.011369 2nd Max: 0.01089 Minimum: 8.7e-05

PDUs from Net1: 1111 PDUs from Net2: 993

PDU Buffer 1

-- Stats from CircularBuffer -- NumPass: 1111
Average: 0.0454914
Variance: 9.77327e-05
Maximum: 0.072468
2nd Max: 0.071876

Minimum: 0.006822

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 993 Average: 0.045871 Variance: 0.000108948 Maximum: 0.084234 2nd Max: 0.08326 Minimum: 0.017104

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.073240 Maximum: 1.278524 Minimum: 0.000004 Variance: 0.008261 Std Dev: 0.090887

SNAPTimes.pl e232t0l.dat

Sel-J Tss avg.:

0.0013592445326902603

Sel-J Tns avg.:

0.0012503101390599696

Sel-J Tnr avg.:

0.0014747276341646287

Sel-J Trs avg.:

0.00040390457250406988

Sel-J NIU avg.:

0.0027649065605309196

Sel-J Nius avg.:

0.0012503101390599696

Sel-J Niur avg.:

0.0014747276341646287

Sel-J Tgs avg.:

0.002488536779377281

Sel-J Tgr avg.:

0.0010931411528706211

DCUAccuracy j15may.024.dat.g g15may.024.dat.ownship Average: 25.782959569540 Stdev: 23.362588882446 Max: 88.464294433594 Min : 0.114157825708

DCUAccuracy g15may.024.dat.j

j15may.024.dat.ownship

Average:

32.575725948817

Stdev: 30.739475250244 Max: 82.592605590820

Min : 0.146003425121

SNAPAccuracy

../DCU/j15may.024.dat.1j

e232t0l.dat.digi1J

Comparing:

../DCU/j15may.024.dat.1j with e232t0l.dat.digi1J

Average: 5.927858049219

Stdev: 0.190764158964 Max: 8.881000518799

Min : 2.940000057220

SNAPAccuracy

../DCU/j15may.024.dat.2j e232t0l.dat.digi2J

Comparing:

../DCU/j15may.024.dat.2j

with e232t0l.dat.digi2J

Average:

14.767419902724

Stdev: 2.967087745667

Max : 33.360149383545 Min : 7.593964099884

SNAPAccuracy

../DCU/j15may.024.dat.3j e232t0l.dat.digi3J

Comparing:

../DCU/j15may.024.dat.3j

with e232t0l.dat.digi3J

Average:

15.789937834306

Stdev: 3.025973796844 Max: 33.360149383545

Min : 7.556231975555

SNAPAccuracy

../DCU/j15may.024.dat.1g

e232t0l.dat.digi1G

Comparing:

../DCU/j15may.024.dat.1g

with e232t0l.dat.digi1G

Average:

28.040101216773

Stdev: 6.475198745728 Max: 36.0000000000000

Min : 0.07299998927

SNAPAccuracy

../DCU/j15may.024.dat.2g

e232t0l.dat.digi2G

Comparing: ../DCU/j15may.024.dat.2g

with e232t0l.dat.digi2G Average: 26.327811196477

Stdev: 7.835760116577 Max: 83.706710815430

Min : 11.625036239624

SNAPAccuracy

../DCU/j15may.024.dat.3g

e232t0l.dat.digi3G

Comparing: ../DCU/j15may.024.dat.3g

with e232t0l.dat.digi3G Average: 27.469885822226 Stdev: 8.001935958862

Max: 83.777473449707

Min: 14.796922683716

SNAPAccuracy

../DCU/g15may.024.dat.1j

e232t0l.dat.digi1J

Comparing: ../DCU/g15may.024.dat.1j

with e232t0l.dat.digi1J Average: 27.787329045008 Stdev: 6.495084762573

Max : 30.008699417114 Min : 0.00400000190

SNAPAccuracy

../DCU/g15may.024.dat.2j

e232t0l.dat.digi2J

Comparing: ../DCU/g15may.024.dat.2i

with e232t0l.dat.digi2J Average: 25.927634056704 Stdev: 5.633468627930 Max: 67.599845886230 Min: 14.851088523865

SNAPAccuracy

../DCU/g15may.024.dat.3j

e232t0l.dat.digi3J

Comparing: ../DCU/g15may.024.dat.3j

with e232t0l.dat.digi3J Average: 27.502872827576 Stdev: 8.415226936340 Max: 83.626029968262

SNAPAccuracy

../DCU/g15may.024.dat.1g

Min: 13.836530685425

e232t0l.dat.digi1G

Comparing: ../DCU/g15may.024.dat.1g

with e232t0l.dat.digi1G Average: 5.996223245417 Stdev: 0.403162807226 Max: 12.0000000000000

Min : 3.00000000000

../DCU/g15may.024.dat.2g

e232t0l.dat.digi2G

Comparing: ../DCU/g15may.024.dat.2g

with e232t0l.dat.digi2G Average: 14.878764538034 Stdev: 3.085600614548 Max: 33.360149383545 Min: 6.190832138062

SNAPAccuracy

../DCU/g15may.024.dat.3g

e232t0l.dat.digi3G

Comparing: ../DCU/g15may.024.dat.3g

with e232t0l.dat.digi3G Average: 15.917836000842 Stdev : 3.110176324844 Max : 33.360149383545 Min : 6.702499389648

7.3.25 Stats.025

/usr1/figd/DIS2.2/dis_lite3.stats

Frames: 503

Average: 0.00301048 Maximum: 0.012768 2nd Max: 0.0088 Minimum: 0.001276

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames : 503 Average: 0.00313994 Maximum: 0.007811

2nd Max: 0.007711 Minimum: 0.001383

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway_lit

e2.stats Frames : 503

Average: 0.00614105 Maximum: 0.022345 2nd Max: 0.012457 Minimum: 0.000296

/sg16/usr1/nets/GATEWAY/gateway_lit

e1.stats Frames : 502

Average: 0.00658546 Maximum: 0.025804 2nd Max: 0.014137 Minimum: 0.000297 /sg16/usr1/nets/DISNET/di

snet7.stats PDUs : 1437 Count : 1062 Average: 1593.5 Maximum: 3367 2nd Max: 2531.65 Minimum: -1043.66

Frames: 205646 Average: 0.000237572 Maximum: 0.012556 2nd Max: 0.010594 Minimum: 8.8e-05

PDUs from Net1: 1577 PDUs from Net2: 1437

PDU Buffer 1
-- Stats from
CircularBuffer -NumPass: 1577
Average: 0.0466132
Variance: 0.000103823
Maximum: 0.077412
2nd Max: 0.072864
Minimum: 0.015225

- End Stats from CircularBuffer --

PDU Buffer 2
-- Stats from
CircularBuffer -NumPass: 1437
Average: 0.0453395
Variance: 9.4859e-05
Maximum: 0.080576
2nd Max: 0.077313
Minimum: 0.006921
-- End Stats from

SNAPPdus.pl Average: 0.063386 Maximum: 1.670919 Minimum: 0.000002 Variance: 0.004584 Std Dev: 0.067703

CircularBuffer --

SNAPTimes.pl e242t0l.dat

Sel-J Tss avg.:

0.0013997157056983487

Sel-J Tns avg.:

0.0013481888670805716

Sel-J Tnr avg.:

0.0014989025842282221

Sel-J Trs avg.:

0.00040274552681999906

Sel-J NIU avg.:

0.0029025467196384549

Sel-J Nius avg.:

0.0013481888670805716

Sel-J Niur avg.:

0.0014989025842282221

Sel-J Tgs avg.:

0.0032540834990235613

Sel-J Tgr avg.:

0.0017998210735624622

DCUAccuracy j15may.025.dat.g

g15may.025.dat.ownship Average: 25.495149957989 Stdev: 23.108667373657 Max: 90.458625793457 Min: 8.829957962036

DCUAccuracy g15may.025.dat.j

j15may.025.dat.ownship Average: 22.743061027275 Stdev : 22.691104888916 Max : 98.103210449219 Min : 0.070710673928

SNAPAccuracy

../DCU/j15may.025.dat.1j

e242t0l.dat.digi1J

Comparing: ../DCU/j15may.025.dat.1j

with e242t0l.dat.digi1J Average: 14.166235528318 Stdev: 3.118561983109 Max: 33.360149383545 Min: 6.261749744415

SNAPAccuracy

../DCU/j15may.025.dat.2j

e242t0l.dat.digi2J

Comparing: ../DCU/j15may.025.dat.2j

with e242t0l.dat.digi2J Average: 15.134935549807 Stdev: 3.209442377090 Max: 33.360149383545 Min: 6.720460414886

SNAPAccuracy

../DCU/j15may.025.dat.3j

e242t0l.dat.digi3J

Comparing: ../DCU/j15may.025.dat.3j

with e242t0l.dat.digi3J Average: 16.714406441395 Stdev: 3.308155059814 Max: 33.360149383545 Min: 7.482083320618

SNAPAccuracy

../DCU/j15may.025.dat.1g

e242t0l.dat.digi1G

Comparing: ../DCU/j15may.025.dat.1g

with e242t0l.dat.digi1G Average: 25.327481279628 Stdev: 5.247653961182 Max: 83.440536499023 Min: 16.061332702637

SNAPAccuracy

../DCU/j15may.025.dat.2g

e242t0l.dat.digi2G

Comparing: ../DCU/j15may.025.dat.2g

with e242t0l.dat.digi2G Average: 26.593122861448 Stdev: 8.162410736084 Max: 83.694519042969 Min: 16.282678604126

SNAPAccuracy

../DCU/j15may.025.dat.3g

e242t0l.dat.digi3G

Comparing: ../DCU/j15may.025.dat.3g

with e242t0l.dat.digi3G Average: 27.833573057008 Stdev: 8.310226440430 Max: 83.694519042969 Min: 16.728443145752

SNAPAccuracy

../DCU/g15may.025.dat.1j

e242t0l.dat.digi1J

Comparing: ../DCU/g15may.025.dat.1j

with e242t0l.dat.digi1J Average: 26.361304571372 Stdev: 8.339023590088 Max: 83.787994384766 Min: 16.358552932739

SNAPAccuracy

../DCU/g15may.025.dat.2j

e242t0l.dat.digi2J

Comparing: ../DCU/g15may.025.dat.2j

with e242t0l.dat.digi2J Average: 26.057404409979 Stdev: 3.809656381607 Max: 37.714355468750 Min: 16.571067810059

SNAPAccuracy

../DCU/g15may.025.dat.3j

e242t0l.dat.digi3J

Comparing: ../DCU/g15may.025.dat.3j

with e242t0l.dat.digi3J Average: 27.511665607728 Stdev: 4.591144084930 Max: 80.026969909668 Min: 16.767969131470 **SNAPAccuracy**

../DCU/g15may.025.dat.1g

e242t0l.dat.digi1G

Comparing:

../DCU/g15may.025.dat.1g with e242t0l.dat.digi1G

Average:

14.055030985857

Stdev: 2.872640848160

Max : 33.360149383545 Min : 9.346370697021

SNAPAccuracy

../DCU/g15may.025.dat.2g

e242t0l.dat.digi2G

Comparing:

../DCU/g15may.025.dat.2g

with e242t0l.dat.digi2G

Average:

14.994498452430

Stdev: 2.992377042770
Max: 33.360149383545
Min: 9.849648475647

SNAPAccuracy

../DCU/g15may.025.dat.3g

e242t0l.dat.digi3G

Comparing:

../DCU/g15may.025.dat.3g

with e242t0l.dat.digi3G

Average:

16.639581012534

Stdev: 3.140893936157

Max : 33.360149383545 Min : 10.692438125610

7.3.26 Stats.026

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.00240744

Maximum: 0.009294 2nd Max: 0.008602

Minimum: 0.008602

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00265347 Maximum: 0.018686 2nd Max: 0.012952 Minimum: 0.001284

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 503

Average: 0.00174559 Maximum: 0.011963 2nd Max: 0.000296 Minimum: 0.000296

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 503

Average: 0.00181285 Maximum: 0.009492 2nd Max: 0.000395 Minimum: 0.000395

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 24 Count: 21

Average: 1625.78 Maximum: 2525.25 2nd Max: 1264.22 Minimum: 1124.86

Frames: 158491 Average: 0.000236592 Maximum: 0.010395 2nd Max: 0.010198 Minimum: 9.5e-05

PDUs from Net1: 16 PDUs from Net2: 24

PDU Buffer 1

- Stats from CircularBuffer --

NumPass: 16 Average: 0.0453551 Variance: 5.35746e-05 Maximum: 0.058431 2nd Max: 0.049532

Minimum: 0.033614

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 24

Average: 0.0469614 Variance: 0.00011968 Maximum: 0.069503 2nd Max: 0.065449 Minimum: 0.028078

- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.535947 Maximum: 2.432122 Minimum: 0.007136 Variance: 0.548078 Std Dev: 0.740323 SNAPTimes.pl e212t0d.dat

Sel-J Tss avg.:

0.0013429742065786813

Sel-J Tns avg.:

0.00097138492076607823

Sel-J Tnr avg.:

0.0015104464286744745

Sel-J Trs avq.:

0.00050006349241783256

Sel-J NIU avg.:

0.0025130496034098397

Sel-J Nius avg.:

0.00097138492076607823

Sel-J Niur avg.:

0.0015104464286744745

Sel-J Tgs avg.:

0.0007149900792726493

Sel-J Tgr avg.:

0.00041780753951844952

DCUAccuracy j15may.026.dat.g

g15may.026.dat.ownship Average: 1.178161136444

Stdev: 1.921193599701 Max: 16.480171203613 Min: 0.125293269753

DCUAccuracy g15may.026.dat.j

j15may.026.dat.ownship Average: 1.349260364595 Stdev: 1.811932682991 Max: 14.103673934937

Min : 0.059093147516

SNAPAccuracy

../DCU/j15may.026.dat.1j e212t0d.dat.digi1J fix

Comparing: ../DCU/j15may.026.dat.1j

with e212t0d.dat.digi1J Average: 0.080321767356 Stdev: 0.264400243759 Max: 5.911000251770 Min: 0.02969999839

SNAPAccuracy

../DCU/j15may.026.dat.2j

e212t0d.dat.digi2J fix

Comparing: ../DCU/j15may.026.dat.2j

with e212t0d.dat.digi2J Average: 0.304461191068 Stdev: 0.328301072121 Max: 6.296999931335 Min: 0.236619994044

SNAPAccuracy

../DCU/j15may.026.dat.3j e212t0d.dat.digi3J fix Comparing:

../DCU/j15may.026.dat.3j with e212t0d.dat.digi3J Average: 0.624930453169

Stdev: 0.416044682264 Max: 6.572000026703

Min : 0.199000000954

SNAPAccuracy

../DCU/j15may.026.dat.1g e212t0d.dat.digi1G fix

Comparing:

../DCU/j15may.026.dat.1g with e212t0d.dat.digi1G Average: 0.285608826160

Stdev: 0.669333815575 Max: 6.342999935150 Min: 0.035550002009

SNAPAccuracy

../DCU/j15may.026.dat.2g e212t0d.dat.digi2G fix

Comparing:

../DCU/j15may.026.dat.2g with e212t0d.dat.digi2G Average: 0.265790772206 Stdev: 0.593998730183 Max: 6.111000061035

Min : 0.000000000000

SNAPAccuracy

../DCU/j15may.026.dat.3g e212t0d.dat.digi3G fix

Comparing:

../DCU/j15may.026.dat.3g with e212t0d.dat.digi3G Average: 0.600121862764

Stdev: 0.610944747925 Max: 6.328999996185 Min: 0.208000004292

SNAPAccuracy

../DCU/g15may.026.dat.1j e212t0d.dat.digi1J fix

Comparing:

../DCU/g15may.026.dat.1j with e212t0d.dat.digi1J Average: 0.188683866770 Stdev: 0.557477295399 Max: 6.275000095367

Min : 0.000699999975

SNAPAccuracy

../DCU/g15may.026.dat.2j e212t0d.dat.digi2J fix

Comparing:

../DCU/g15may.026.dat.2j with e212t0d.dat.digi2J Average: 0.325228481587 Stdev: 0.518084228039 Max: 5.947999954224 Min: 0.057000000030

SNAPAccuracy

../DCU/g15may.026.dat.3j e212t0d.dat.digi3J fix

Comparing: ../DCU/g15may.026.dat.3j

with e212t0d.dat.digi3J Average: 0.648696052702 Stdev: 0.489933729172 Max: 5.730000019073 Min: 0.275000005960

SNAPAccuracy

../DCU/g15may.026.dat.1g e212t0d.dat.digi1G fix

Comparing: ../DCU/g15may.026.dat.1g

with e212t0d.dat.digi1G Average: 0.011300220754 Stdev: 0.016217470169 Max: 0.060300000012 Min: 0.00000000000000

SNAPAccuracy

../DCU/g15may.026.dat.2g e212t0d.dat.digi2G fix

Comparing: ../DCU/g15may.026.dat.2g

with e212t0d.dat.digi2G Average: 0.364775446165 Stdev: 0.187713950872 Max: 3.296999931335 Min: 0.295800000429

SNAPAccuracy

../DCU/g15may.026.dat.3g e212t0d.dat.digi3G fix

Comparing: ../DCU/g15may.026.dat.3g

with e212t0d.dat.digi3G Average: 0.683940783921 Stdev: 0.328870028257 Max: 5.330999851227 Min: 0.571999967098

7.3.27 Stats.027

/usr1/figd/DIS2.2/dis4.stats

Frames: 501

Average: 0.00255595 Maximum: 0.009788 2nd Max: 0.00791 Minimum: 0.001483

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 500

Average: 0.00260503 Maximum: 0.012867 2nd Max: 0.009195 Minimum: 0.001581

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 500

Average: 0.00305648 Maximum: 0.014844 2nd Max: 0.013545 Minimum: 0.000395

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 501

Average: 0.00293568 Maximum: 0.011977 2nd Max: 0.01048 Minimum: 0.000297

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 487 Count: 479 Average: 1535.6 Maximum: 2531.65 2nd Max: 2531.65 Minimum: -110.963

Frames: 188711 Average: 0.000231192 Maximum: 0.010297 2nd Max: 0.010198 Minimum: 9.5e-05

PDUs from Net1: 476 PDUs from Net2: 488

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 476 Average: 0.0444422 Variance: 8.96886e-05 Maximum: 0.07237 2nd Max: 0.064363 Minimum: 0.018488

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 488 Average: 0.0447932 Variance: 9.35956e-05 Maximum: 0.07367 2nd Max: 0.072371 Minimum: 0.019378

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.123918 Maximum: 1.171241 Minimum: 0.000021 Variance: 0.011035 Std Dev: 0.105049

SNAPTimes.pl e222t0d.dat

Sel-J Tss avg.:

0.0012776918486978074

Sel-J Tns avg.:

0.00085180318103381103

Sel-J Tnr avg.:

0.0015335029821864203

Sel-J Trs avg.:

0.00062563021842734681

Sel-J NIU avg.:

0.0024368210737517096

Sel-J Nius avg.:

0.00085180318103381103

Sel-J Niur avg.:

0.0015335029821864203

Sel-J Tgs avg.:

0.0013124194836267595

Sel-J Tgr avg.:

0.001037596420899439

DCUAccuracy

j15may.027.dat.g

g15may.027.dat.ownship Average: 0.983124183291 Stdev: 0.948954939842 Max: 5.824259757996

Min : 0.119576081634

DCUAccuracy

g15may.027.dat.j

j15may.027.dat.ownship Average: 1,296171885248

Stdev: 1.086813330650

Max : 5.329166412354

Min : 0.027658633888

SNAPAccuracy

../DCU/j15may.027.dat.1j

e222t0d.dat.digi1J

Comparing:

../DCU/j15may.027.dat.1j with e222t0d.dat.digi1J Average: 0.071335361249

Stdev: 0.018903097138 Max: 0.119300000370

Min : 0.008600000292

SNAPAccuracy

../DCU/j15may.027.dat.2j

e222t0d.dat.digi2J

Comparing: ../DCU/j15may.027.dat.2j

with e222t0d.dat.digi2J Average: 0.271567094757 Stdev: 0.020990483463 Max: 0.335000008345 Min: 0.177699998021

SNAPAccuracy

../DCU/j15may.027.dat.3j

e222t0d.dat.digi3J

Comparing: ../DCU/j15may.027.dat.3j

with e222t0d.dat.digi3J Average: 8.014437972063 Stdev: 1.938682913780 Max: 10.069342613220 Min: 1.746380567551

SNAPAccuracy

../DCU/j15may.027.dat.1g

e222t0d.dat.digi1G

Comparing: ../DCU/j15may.027.dat.1g

with e222t0d.dat.digi1G Average: 0.257451012761 Stdev: 0.106628738344 Max: 0.460000008345 Min: 0.054749999195

SNAPAccuracy

../DCU/j15may.027.dat.2g

e222t0d.dat.digi2G

Comparing: ../DCU/j15may.027.dat.2g

with e222t0d.dat.digi2G Average: 0.112432653151 Stdev: 0.078264027834 Max: 0.289000004530 Min: 0.000000000000

SNAPAccuracy

../DCU/j15may.027.dat.3g

e222t0d.dat.digi3G

Comparing: ../DCU/j15may.027.dat.3g

with e222t0d.dat.digi3G Average: 24.829984832872 Stdev: 6.066266536713 Max: 37.067764282227 Min: 3.194967508316

SNAPAccuracy

../DCU/g15may.027.dat.1j

e222t0d.dat.digi1J

Comparing: ../DCU/g15may.027.dat.1j

with e222t0d.dat.digi1J Average: 0.195139344772 Stdev: 0.106305643916 Max: 0.409999996424 Min: 0.004000000190

../DCU/q15may.027.dat.2i

e222t0d.dat.digi2J

Comparing: ../DCU/g15may.027.dat.2j

with e222t0d.dat.digi2J Average: 0.163307377273 Stdev: 0.102758429945 Max: 0.373999983072 Min: 0.001000000047

SNAPAccuracy

../DCU/g15may.027.dat.3j

e222t0d.dat.digi3J

Comparing: ../DCU/g15may.027.dat.3j

with e222t0d.dat.digi3J Average: 25.107179210019 Stdev : 5.501130580902 Max : 38.580738067627 Min : 5.095469951630

SNAPAccuracy

../DCU/g15may.027.dat.1g

e222t0d.dat.digi1G

Comparing: ../DCU/g15may.027.dat.1g

with e222t0d.dat.digi1G Average: 0.012897610375 Stdev: 0.016522066668 Max: 0.067999996245 Min: 0.0000000000000

SNAPAccuracy

../DCU/g15may.027.dat.2g

e222t0d.dat.digi2G

Comparing: ../DCU/g15may.027.dat.2g

with e222t0d.dat.digi2G Average: 0.348901890488 Stdev: 0.023379869759 Max: 0.444600015879 Min: 0.275600016117

SNAPAccuracy

../DCU/g15may.027.dat.3g

e222t0d.dat.digi3G

Comparing: ../DCU/g15may.027.dat.3g

with e222t0d.dat.digi3G Average: 7.966758637064 Stdev: 1.959855079651 Max: 10.059631347656 Min: 1.903706192970

7.3.28 Stats.028

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.00285645 Maximum: 0.009294 2nd Max: 0.008305 Minimum: 0.001482

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00263772 Maximum: 0.00702 2nd Max: 0.001383 Minimum: 0.001383

RateErr: 0

/sg16/usr1/nets/GATEWA

Y/gateway1.stats Frames : 503

Average: 0.00416128 Maximum: 0.015833 2nd Max: 0.013644 Minimum: 0.000395

/sg16/usr1/nets/GATEWA

Y/gateway2.stats Frames: 503

Average: 0.00393224 Maximum: 0.021355 2nd Max: 0.011666 Minimum: 0.000296

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs: 954 Count: 722 Average: 1473.09 Maximum: 3367 2nd Max: 2531.65 Minimum: -9259.26

Frames: 239784 Average: 0.000232187 Maximum: 0.013941 2nd Max: 0.011667 Minimum: 9.5e-05

PDUs from Net1: 942 PDUs from Net2: 955

PDU Buffer 1
-- Stats from
CircularBuffer -NumPass: 942
Average: 0.0457394
Variance: 9.26617e-05
Maximum: 0.072963
2nd Max: 0.06802
Minimum: 0.016213

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 955 Average: 0.044874 Variance: 9.34286e-05 Maximum: 0.075138 2nd Max: 0.068515 Minimum: 0.011073

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.091618 Maximum: 1.104167 Minimum: 0.000018 Variance: 0.003843 Std Dev: 0.061989

SNAPTimes.pl e232t0d.dat

Sel-J Tss avg.:

0.0013450457256590062

Sel-J Tns avg.:

0.00089906163049734958

Sel-J Tnr avg.:

0.0016345069581972782

Sel-J Trs avg.:

0.00047962027844333202

Sel-J NIU avg.:

0.0025699065607811822

Sel-J Nius avg.:

0.00089906163049734958

Sel-J Niur avg.:

0.0016345069581972782

Sel-J Tgs avg.:

0.0019798528828144824

Sel-J Tgr avg.:

0.0014879642147073249

DCUAccuracy j15may.028.dat.g

g15may.028.dat.ownship Average: 1.163827487558 Stdev: 2.119851589203 Max: 14.410882949829 Min: 0.047598876059

DCUAccuracy g15may.028.dat.j

j15may.028.dat.ownship Average: 1.564423444213 Stdev: 2.207443475723 Max: 13.485103607178 Min: 0.028635641560

SNAPAccuracy

../DCU/j15may.028.dat.1j e232t0d.dat.digi1J

Comparing: ../DCU/j15may.028.dat.1j

with e232t0d.dat.digi1J Average: 0.107510744594 Stdev: 0.317564964294 Max: 3.101000070572 Min: 0.000399999990

SNAPAccuracy

../DCU/j15may.028.dat.2j e232t0d.dat.digi2J

Comparing: ../DCU/j15may.028.dat.2j

with e232t0d.dat.digi2J Average: 5.568721788750 Stdev: 2.475700855255 Max: 18.999366760254 Min: 0.923450052738

SNAPAccuracy

../DCU/j15may.028.dat.3j e232t0d.dat.digi3J

Comparing: ../DCU/j15may.028.dat.3j

with e232t0d.dat.digi3J Average: 7.916027635876 Stdev: 2.109972238541 Max: 18.244255065918 Min: 1.891004204750

SNAPAccuracy

../DCU/j15may.028.dat.1g

e232t0d.dat.digi1G

Comparing: ../DCU/j15may.028.dat.1g

with e232t0d.dat.digi1G Average: 0.342513477952 Stdev: 0.858523786068 Max: 6.310800075531 Min: 0.039299998432

SNAPAccuracy

../DCU/j15may.028.dat.2g

e232t0d.dat.digi2G

Comparing: ../DCU/j15may.028.dat.2g

with e232t0d.dat.digi2G Average: 23.290835797302 Stdev : 5.946616649628 Max : 38.462871551514 Min : 3.450977325439

SNAPAccuracy

../DCU/j15may.028.dat.3g

e232t0d.dat.digi3G

Comparing: ../DCU/j15may.028.dat.3g

with e232t0d.dat.digi3G Average: 25.362099776423 Stdev: 6.223466396332 Max: 42.151412963867 Min: 3.845486164093

SNAPAccuracy

../DCU/g15may.028.dat.1j

e232t0d.dat.digi1J

Comparing: ../DCU/g15may.028.dat.1j

with e232t0d.dat.digi1J

Average: 0.287611969658 Stdev: 0.881554543972 Max: 6.221800327301 Min: 0.001099999994

SNAPAccuracy

../DCU/g15may.028.dat.2j e232t0d.dat.digi2J

Comparing:

../DCU/g15may.028.dat.2j with e232t0d.dat.digi2J

Average:

23.412750293469

Stdev: 6.160529613495 Max: 38.697311401367

Min : 2.917128086090

SNAPAccuracy

../DCU/g15may.028.dat.3j e232t0d.dat.digi3J

Comparing:

../DCU/g15may.028.dat.3j with e232t0d.dat.digi3J

Average:

25.400375650572

Stdev: 6.411759376526 Max: 42.289909362793 Min: 3.473199367523

SNAPAccuracy

../DCU/g15may.028.dat.1g

e232t0d.dat.digi1G

Comparing:

../DCU/g15may.028.dat.1g with e232t0d.dat.digi1G Average: 0.041358571048

Stdev: 0.297161370516 Max: 3.042000055313 Min: 0.00000000000000

SNAPAccuracy

../DCU/g15may.028.dat.2g

e232t0d.dat.digi2G

Comparing:

../DCU/g15may.028.dat.2g with e232t0d.dat.digi2G Average: 5.632222447837 Stdev : 2.502779722214 Max : 18.860361099243 Min : 1.129910588264

SNAPAccuracy

../DCU/g15may.028.dat.3g

e232t0d.dat.digi3G

Comparing:

../DCU/g15may.028.dat.3g with e232t0d.dat.digi3G Average: 7.946238104726

Stdev : 2.103248119354

7.3.29 Stats.029

/usr1/figd/DIS2.2/dis4.stats

Max : 18.057571411133

Min : 2.127623319626

Frames: 503

Average: 0.00283001 Maximum: 0.012274 2nd Max: 0.009887 Minimum: 0.001285

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00301181 Maximum: 0.012571 2nd Max: 0.011468 Minimum: 0.001384

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 503

Average: 0.00505439 Maximum: 0.014928 2nd Max: 0.013445 Minimum: 0.000395

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 503

Average: 0.00507717 Maximum: 0.015126 2nd Max: 0.014533 Minimum: 0.000297

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 1406 Count: 887 Average: 1626.1 Maximum: 3367 2nd Max: 2538.07 Minimum: -623.247

Frames: 211583 Average: 0.000239094 Maximum: 0.016312 2nd Max: 0.013347 Minimum: 9.5e-05

PDUs from Net1: 1395 PDUs from Net2: 1407

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 1395 Average: 0.0460945 Variance: 9.3892e-05 Maximum: 0.08148 2nd Max: 0.068316 Minimum: 0.015126

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 1407 Average: 0.0461566 Variance: 0.000100004 Maximum: 0.079884 2nd Max: 0.067032 Minimum: 0.013445

- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.075630 Maximum: 2.041934 Minimum: 0.000017 Variance: 0.011362 Std Dev: 0.106594

SNAPTimes.pl e242t0d.dat

Sel-J Tss avg.:

0.0013245924456493103

Sel-J Tns avg.:

0.0010168628234700457

Sel-J Tnr avg.:

0.0018626660039770151

Sel-J Trs avg.:

0.00040528429430843727

Sel-J NIU avg.:

0.002938129225140345

Sel-J Nius avg.:

0.0010168628234700457

Sel-J Niur avg.:

0.0018626660039770151

Sel-J Tgs avg.:

0.0024347395623296269

Sel-J Tgr avg.:

0.0019555487076644961

DCUAccuracy j15may.029.dat.g q15may.029.dat.ownship

Average: 0.941233519661 Stdev: 1.105089426041 Max: 15.980352401733 Min: 0.053143322468

DCUAccuracy g15may.029.dat.j

j15may.029.dat.ownship Average: 1.343451496184 Stdev: 1.260017752647 Max: 13.809101104736 Min: 0.043320205063 **SNAPAccuracy**

../DCU/j15may.029.dat.1j e242t0d.dat.digi1J

Comparing:

../DCU/j15may.029.dat.1j with e242t0d.dat.digi1J Average: 4.356715006283 Stdev: 1.312168717384

Max : 10.251714706421 Min : 0.561636209488

SNAPAccuracy

../DCU/j15may.029.dat.2j

e242t0d.dat.digi2J

Comparing:

../DCU/j15may.029.dat.2j with e242t0d.dat.digi2J Average: 4.733193406140 Stdev : 1.844073414803 Max : 10.130471229553 Min : 1.057794809341

SNAPAccuracy

../DCU/j15may.029.dat.3j

e242t0d.dat.digi3J

Comparing:

../DCU/j15may.029.dat.3j with e242t0d.dat.digi3J Average: 7.640180176042

Stdev: 2.184703350067 Max: 10.062777519226

Min: 1.904669523239

SNAPAccuracy

../DCU/j15may.029.dat.1g e242t0d.dat.digi1G

Comparing:

../DCU/j15may.029.dat.1g with e242t0d.dat.digi1G

Average:

22.619628911136

Stdev: 5.193712234497 Max: 38.775722503662 Min: 3.398098945618

SNAPAccuracy

../DCU/j15may.029.dat.2g

e242t0d.dat.digi2G

Comparing:

../DCU/j15may.029.dat.2g with e242t0d.dat.digi2G

Average:

23.002721569799

Stdev: 5.866126537323 Max: 40.007953643799 Min: 2.887112855911 SNAPAccuracy ../DCU/i15mav.0

../DCU/j15may.029.dat.3g

e242t0d.dat.digi3G

Comparing: ../DCU/j15may.029.dat.3g

with e242t0d.dat.digi3G Average: 25.760248593342 Stdev: 5.775040626526 Max: 41.328365325928 Min: 5.095469951630

SNAPAccuracy

../DCU/g15may.029.dat.1j

e242t0d.dat.digi1J

Comparing: ../DCU/g15may.029.dat.1j

with e242t0d.dat.digi1J Average: 22.247332044941 Stdev: 5.523328781128 Max: 34.320606231689 Min: 2.750246047974

SNAPAccuracy

../DCU/g15may.029.dat.2j

e242t0d.dat.digi2J

Comparing: ../DCU/g15may.029.dat.2j

with e242t0d.dat.digi2J Average: 22.648491867158 Stdev: 5.747748851776 Max: 35.736854553223 Min: 2.938859701157

SNAPAccuracy

../DCU/g15may.029.dat.3j

e242t0d.dat.digi3J

Comparing: ../DCU/g15may.029.dat.3j

with e242t0d.dat.digi3J Average: 25.103067578574 Stdev : 6.261007308960 Max : 38.824218750000 Min : 3.473199367523

SNAPAccuracy

../DCU/g15may.029.dat.1g

e242t0d.dat.digi1G

Comparing: ../DCU/g15may.029.dat.1g

with e242t0d.dat.digi1G Average: 4.326428152351 Stdev: 1.308157682419 Max: 12.043653488159 Min: 0.500287950039

SNAPAccuracy

../DCU/g15may.029.dat.2g

e242t0d.dat.digi2G

Comparing: ../DCU/g15may.029.dat.2g

with e242t0d.dat.digi2G Average: 4.854277766134 Stdev: 1.960909962654 Max: 12.582414627075 Min: 1.129910588264

SNAPAccuracy

../DCU/g15may.029.dat.3g

e242t0d.dat.digi3G

Comparing: ../DCU/g15may.029.dat.3g

with e242t0d.dat.digi3G Average: 7.772070040186 Stdev: 2.125646829605 Max: 15.430429458618 Min: 2.061659812927

7.3.30 Stats.030

/usr1/figd/DIS2.2/dis4.stats /usr1/figd/DIS2.2/dis3.stats /usr1/figd/DIS2.2/dis_lite3.stats

Frames: 500

Average: 0.00267747 Maximum: 0.008898 2nd Max: 0.004251 Minimum: 0.001483

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.stats

Frames: 501

Average: 0.00270793 Maximum: 0.012472 2nd Max: 0.0088 Minimum: 0.001582

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway_lit

e2.stats Frames: 501

Average: 0.00250522 Maximum: 0.014335 2nd Max: 0.00959 Minimum: 0.000198

/sg16/usr1/nets/GATEWAY/gateway_lit

e1.stats Frames: 500

Average: 0.00263716 Maximum: 0.013941 2nd Max: 0.012358 Minimum: 0.000296

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 2

Average: 0.0036085 Maximum: 0.006822 2nd Max: 0.000395 Minimum: 0.000395 /sg16/usr1/nets/GATEWA

Y/gateway2.stats

Frames: 2

Average: 0.002619 Maximum: 0.004843 2nd Max: 0.000395 Minimum: 0.000395

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs : 55 Count : 49

Average: 1300.23 Maximum: 2525.25 2nd Max: 2024.29 Minimum: -4784.69

Frames: 218245 Average: 0.000228225 Maximum: 0.010298 2nd Max: 0.010198 Minimum: 5.9e-05

PDUs from Net1: 185 PDUs from Net2: 55

PDU Buffer 1
-- Stats from
CircularBuffer -NumPass: 185
Average: 0.0448073
Variance: 0.000102113
Maximum: 0.068415
2nd Max: 0.065548

Minimum: 0.020071
-- End Stats from
CircularBuffer --

PDU Buffer 2
-- Stats from

CircularBuffer -- NumPass: 55

Average: 0.0456328 Variance: 0.000130553 Maximum: 0.07504 2nd Max: 0.04795 Minimum: 0.014039

End Stats fromCircularBuffer --

SNAPPdus.pl Average: 0.174453 Maximum: 2.188749 Minimum: 0.000166 Variance: 0.080478 Std Dev: 0.283687

SNAPTimes.pl e212t0dl.dat Sel-J Tss avg.:

0.0014208588474275078

Sel-J Tns avg.:

0.0013248270380872655

Sel-J Tnr avg.:

0.0012092882702863085

Sel-J Trs avg.:

0.00062405169004954911

Sel-J NIU avg.:

0.0026123876742778851

Sel-J Nius avg.:

0.0013248270380872655

Sel-J Niur avg.:

0.0012092882702863085

Sel-J Tgs avg.:

0.0012624433397099739

Sel-J Tgr avg.:

0.00067703379694211327

DCUAccuracy j15may.030.dat.g

g15may.030.dat.ownship Average: 14.258544315879 Stdev: 28.734155654907 Max: 91.483634948730 Min: 0.041115082800

DCUAccuracy g15may.030.dat.j

j15may.030.dat.ownship Average: 19.832881525008 Stdev: 29.933147430420 Max: 94.990180969238 Min: 0.055803224444

SNAPAccuracy

../DCU/j15may.030.dat.1j

e212t0dl.dat.digi1J

Comparing: ../DCU/j15may.030.dat.1j

with e212t0dl.dat.digi1J Average: 0.104289094470 Stdev: 0.596920311451 Max: 12.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/j15may.030.dat.2j e212t0dl.dat.digi2J

Comparing: ../DCU/j15may.030.dat.2j

with e212t0dl.dat.digi2J Average: 0.346112820554 Stdev: 0.582596778870 Max: 12.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/j15may.030.dat.3j

e212t0dl.dat.digi3J

Comparing: ../DCU/j15may.030.dat.3j

with e212t0dl.dat.digi3J Average: 0.668180225661

Stdev: 0.564020037651 Max : 12.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/j15may.030.dat.1g e212t0dl.dat.digi1G

Comparing: ../DCU/j15may.030.dat.1g

with e212t0dl.dat.digi1G Average: 23.631593549782 Stdev: 0.215781807899 Max : 24.024599075317 Min : 23.250000000000

SNAPAccuracy

../DCU/j15may.030.dat.2g e212t0dl.dat.digi2G

Comparing: ../DCU/j15may.030.dat.2g

with e212t0dl.dat.digi2G Average: 20.930201812312 Stdev: 3.117240428925 Max : 36.000000000000 Min : 17.633998870850

SNAPAccuracy

../DCU/i15may.030.dat.3g e212t0dl.dat.digi3G

Comparing: ../DCU/j15may.030.dat.3g

with e212t0dl.dat.digi3G Average: 20.930201812312 Stdev: 3.117240428925 Max : 36.000000000000 Min: 17.633998870850

SNAPAccuracy

../DCU/g15may.030.dat.1j e212t0dl.dat.digi1J

Comparing: ../DCU/g15may.030.dat.1j

with e212t0dl.dat.digi1J Average: 20.921926861350 Stdev: 3.131692409515 Max : 36.000000000000 Min : 17.604000091553

SNAPAccuracy

../DCU/g15may.030.dat.2j

e212t0dl.dat.digi2J

Comparing: ../DCU/q15may.030.dat.2i

with e212t0dl.dat.digi2J Average: 20.921926861350 Stdev: 3.131692409515 Max : 36.000000000000 Min : 17.604000091553

SNAPAccuracy

../DCU/q15may.030.dat.3i e212t0dl.dat.digi3J

Comparing: ../DCU/g15may.030.dat.3j

with e212t0dl.dat.digi3J

Average:

26.641098929803

Stdev: 2.881231546402 Max : 36.000000000000 Min: 18.000000000000

SNAPAccuracy

../DCU/g15may.030.dat.1g e212t0dl.dat.digi1G

Comparing:

../DCU/g15may.030.dat.1g with e212t0dl.dat.digi1G Average: 0.046913299693 Stdev: 0.600295066833 Max : 12.000000000000

Min : 0.000000000000

SNAPAccuracy

../DCU/g15may.030.dat.2g e212t0dl.dat.digi2G

Comparing:

../DCU/g15may.030.dat.2g with e212t0dl.dat.digi2G Average: 0.424860317103 Stdev: 0.577952325344 Max : 12.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/g15may.030.dat.3g

e212t0dl.dat.digi3G

Comparing:

../DCU/g15may.030.dat.3g with e212t0dl.dat.digi3G Average: 0.749140708859 Stdev: 0.559327840805 Max : 12.000000000000 Min : 0.000000000000

7.3.31 Stats.031

/usr1/figd/DIS2.2/dis lite3.

stats

Frames: 501

Average: 0.0028075 Maximum: 0.006822 2nd Max: 0.006525 Minimum: 0.001581

RateErr: 0

/usr1/figd/DIS2.2/dis lite4.

stats

Frames: 501

Average: 0.00275726 Maximum: 0.012966

2nd Max: 0.007316 Minimum: 0.001582

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway lit

e2.stats Frames: 501

Average: 0.00368969 Maximum: 0.017994 2nd Max: 0.011666 Minimum: 0.000197

/sg16/usr1/nets/GATEWAY/gateway_lit

e1.stats Frames: 501

Average: 0.00402909 Maximum: 0.012753 2nd Max: 0.003954 Minimum: 0.000296

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 524 Count: 488 Average: 1544.12 Maximum: 3367 2nd Max: 2531.65 Minimum: -560.774

Frames: 219547 Average: 0.000228581 Maximum: 0.01089 2nd Max: 0.010198 Minimum: 9.5e-05

PDUs from Net1: 652 PDUs from Net2: 524

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 652 Average: 0.045473 Variance: 9.64523e-05 Maximum: 0.076537 2nd Max: 0.075435 Minimum: 0.012655

-- End Stats from CircularBuffer --

PDU Buffer 2

- Stats from CircularBuffer --

NumPass: 524 Average: 0.0444363 Variance: 9.16066e-05 Maximum: 0.069602 2nd Max: 0.06843 Minimum: 0.018587

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.081099

Maximum: 1.830305 Minimum: 0.000005 Variance: 0.010439 Std Dev: 0.102172

SNAPTimes.pl e222t0dl.dat

Sel-J Tss avg.:

0.0013857693834659398

Sel-J Tns avg.:

0.0013552723660399475

Sel-J Tnr avg.:

0.0013364194831593337

Sel-J Trs avg.:

0.00040231610344682131

Sel-J NIU avg.:

0.0027306660041261639

Sel-J Nius avg.:

0.0013552723660399475

Sel-J Niur avg.:

0.0013364194831593337

Sel-J Tgs avg.:

0.0018727236578266913

Sel-J Tgr avg.:

0.0012724552686936288

DCUAccuracy j15may.031.dat.g g15may.031.dat.ownship

Average: 15.003149708839 Stdev: 27.992132186890 Max: 89.670639038086 Min: 0.039813823998

DCUAccuracy g15may.031.dat.j

j15may.031.dat.ownship Average: 13.642307178379 Stdev: 22.098327636719 Max: 94.018974304199 Min: 0.131244048476

SNAPAccuracy

../DCU/j15may.031.dat.1j

e222t0dl.dat.digi1J

Comparing: ../DCU/j15may.031.dat.1j

with e222t0dl.dat.digi1J Average: 0.190784277944 Stdev : 0.775004029274 Max : 6.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/j15may.031.dat.2j

e222t0dl.dat.digi2J

Comparing: ../DCU/j15may.031.dat.2j

with e222t0dl.dat.digi2J Average: 0.441427730728 Stdev: 0.888626039028 Max: 12.000000000000 Min: 0.0000000000000 **SNAPAccuracy**

../DCU/j15may.031.dat.3j

e222t0dl.dat.digi3J

Comparing:

../DCU/j15may.031.dat.3j with e222t0dl.dat.digi3J Average: 4.770097684812 Stdev: 2.344663619995 Max: 33.360149383545 Min: 1.862884044647

SNAPAccuracy

../DCU/j15may.031.dat.1g

e222t0dl.dat.digi1G

Comparing:

../DCU/j15may.031.dat.1g with e222t0dl.dat.digi1G

Average:

23.873933703130

Stdev: 0.713566124439 Max: 29.976900100708 Min: 21.487998962402

SNAPAccuracy

../DCU/j15may.031.dat.2g e222t0dl.dat.digi2G

Comparing:

../DCU/j15may.031.dat.2g with e222t0dl.dat.digi2G

Average:

26.916530632344

Stdev: 3.094236612320 Max: 35.976898193359 Min: 21.549999237061

SNAPAccuracy

../DCU/j15may.031.dat.3g

e222t0dl.dat.digi3G

Comparing:

../DCU/j15may.031.dat.3g with e222t0dl.dat.digi3G

Average:

23.885841236153

Stdev: 9.233423233032 Max: 83.730163574219 Min: 4.270264625549

SNAPAccuracy

../DCU/g15may.031.dat.1j

e222t0dl.dat.digi1J

Comparing:

../DCU/g15may.031.dat.1j with e222t0dl.dat.digi1J

Average:

23.834083019357

Stdev: 0.416068643332 Max: 29.875999450684

Min : 21.572000503540

SNAPAccuracy

../DCU/g15may.031.dat.2j

e222t0dl.dat.digi2J

Comparing: ../DCU/g15may.031.dat.2j

with e222t0dl.dat.digi2J Average: 29.644941581432 Stdev: 0.456480085850 Max: 35.630001068115 Min: 27.344999313354

SNAPAccuracy

../DCU/g15may.031.dat.3j

e222t0dl.dat.digi3J

Comparing: ../DCU/g15may.031.dat.3j

with e222t0dl.dat.digi3J Average: 23.332757564877 Stdev: 9.358803749084 Max: 83.815643310547

Min: 4.872584819794

SNAPAccuracy

../DCU/g15may.031.dat.1g

e222t0dl.dat.digi1G

Comparing: ../DCU/g15may.031.dat.1g

with e222t0dl.dat.digi1G Average: 0.080110765321 Stdev: 0.720819532871 Max: 12.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/g15may.031.dat.2g

e222t0dl.dat.digi2G

Comparing: ../DCU/g15may.031.dat.2g

with e222t0dl.dat.digi2G Average: 0.459770618730 Stdev: 0.695485174656 Max: 12.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/g15may.031.dat.3g

e222t0dl.dat.digi3G

Comparing: ../DCU/g15may.031.dat.3g

with e222t0dl.dat.digi3G Average: 5.704382898822 Stdev: 2.544368028641 Max: 33.360149383545 Min: 2.094376564026

7.3.32 Stats.032

/usr1/figd/DIS2.2/dis_lite3.stats

Frames: 503

Average: 0.0027608

Maximum: 0.009689 2nd Max: 0.001681 Minimum: 0.001681

RateErr: 0

/usr1/figd/DIS2.2/dis lite4.stats

Frames: 503 Average: 0.00309096

Maximum: 0.009392 2nd Max: 0.001681 Minimum: 0.001681

RateErr: 0

/sg16/usr1/nets/GATEWAY/gateway lit

e2.stats Frames: 503

Average: 0.00484213 Maximum: 0.017414 2nd Max: 0.015028 Minimum: 0.000297

/sg16/usr1/nets/GATEWAY/gateway lit

e1.stats Frames: 503 Average: 0.0087976 Maximum: 0.027401

2nd Max: 0.019872 Minimum: 0.000297

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 997 Count: 836 Average: 1597.19 Maximum: 3378.38 2nd Max: 3367 Minimum: -232.126

Frames: 174504 Average: 0.000237637 Maximum: 0.011977 2nd Max: 0.010989 Minimum: 9.5e-05

PDUs from Net1: 1111 PDUs from Net2: 997

PDU Buffer 1

- Stats from CircularBuffer --

NumPass: 1111 Average: 0.0451918 Variance: 0.000104629 Maximum: 0.091353 2nd Max: 0.072469 Minimum: 0.011666

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 997

Average: 0.0454681 Variance: 0.000112936 Maximum: 0.079786 2nd Max: 0.075633 Minimum: 0.013545 -- End Stats from CircularBuffer --

SNAPPdus.pl Average: 0.065479 Maximum: 1.298247 Minimum: 0.000013 Variance: 0.002783 Std Dev: 0.052755

SNAPTimes.pl e232t0dl.dat Sel-J Tss avg.:

0.0013296858846255305

Sel-J Tns avg.:

0.0012630616302500622

Sel-J Tnr avg.:

0.0013970894637544478

Sel-J Trs avg.:

0.00062428230611157509

Sel-J NIU avg.:

0.0026988886684935196

Sel-J Nius avg.:

0.0012630616302500622

Sel-J Niur avg.:

0.0013970894637544478

Sel-J Tgs_avg.:

0.0048796322067866703

Sel-J Tgr avg∴-

0.00013930019906932157

DCUAccuracy j15may.032.dat.g q15may.032.dat.ownship Average: 4.004088411225 Stdev: 11.982272148132

Max: 73.621421813965 Min : 0.032005563378

DCUAccuracy q15may.032.dat.i

i15may.032.dat.ownship Average: 3.851970902482 Stdev: 12.119730949402

Max : 64.973213195801 Min : 0.052773099393

SNAPAccuracy

../DCU/j15may.032.dat.1j e232t0dl.dat.digi1J

Comparing:

../DCU/j15may.032.dat.1j with e232t0dl.dat.digi1J Average: 0.137059110821 Stdev: 0.702714383602 Max : 12.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/i15may.032.dat.2i e232t0dl.dat.digi2J

Comparing: ../DCU/j15may.032.dat.2j

with e232t0dl.dat.digi2J Average: 4.760306677192 Stdev: 2.270246744156 Max: 33.360149383545 Min : 1.054468631744

SNAPAccuracy

../DCU/j15may.032.dat.3j e232t0dl.dat.digi3J

Comparing: ../DCU/j15may.032.dat.3j

with e232t0dl.dat.digi3J Average: 6.558944405931 Stdev: 2.953243017197 Max: 33.360149383545 Min : 1.816126942635

SNAPAccuracy

../DCU/j15may.032.dat.1g

e232t0dl.dat.digi1G

Comparing: ../DCU/j15may.032.dat.1g

with e232t0dl.dat.digi1G Average: 20.166558362665 Stdev: 4.739023208618 Max : 36.000000000000 Min : 0.057999998331

SNAPAccuracy

../DCU/j15may.032.dat.2g e232t0dl.dat.digi2G

Comparing: ../DCU/j15may.032.dat.2g

with e232t0dl.dat.digi2G Average: 22.966395788076 Stdev: 9.237516403198 Max: 94.343276977539 Min : 3.297692775726

SNAPAccuracy

../DCU/j15may.032.dat.3g e232t0dl.dat.digi3G

Comparing: ../DCU/j15may.032.dat.3g

with e232t0dl.dat.digi3G Average: 23.831720291114 Stdev: 8.493778228760 Max: 81.232055664062 Min : 4.145637512207

SNAPAccuracy

../DCU/q15may.032.dat.1j

e232t0dl.dat.digi1J

Comparing: ../DCU/g15may.032.dat.1j

with e232t0dl.dat.digi1J

Average: 22.795016791822 Stdev : 4.530866146088 Max : 36.000000000000 Min : 0.004000000190

SNAPAccuracy

../DCU/g15may.032.dat.2j e232t0dl.dat.digi2J

Comparing: ../DCU/g15may.032.dat.2j

with e232t0dl.dat.digi2J Average: 23.576828778759 Stdev : 9.364469528198 Max : 83.565254211426 Min : 3.366096258163

SNAPAccuracy

../DCU/g15may.032.dat.3j

e232t0dl.dat.digi3J

Comparing: ../DCU/g15may.032.dat.3j

with e232t0dl.dat.digi3J Average: 24.530070671221 Stdev : 9.879047393799 Max : 93.822662353516 Min : 4.241505622864

SNAPAccuracy

../DCU/g15may.032.dat.1g

e232t0dl.dat.digi1G

Comparing: ../DCU/g15may.032.dat.1g

with e232t0dl.dat.digi1G Average: 0.049889717600 Stdev: 0.423207312822 Max: 6.0000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/g15may.032.dat.2g

e232t0dl.dat.digi2G

Comparing: ../DCU/g15may.032.dat.2g

with e232t0dl.dat.digi2G Average: 4.611722651509 Stdev: 2.068583250046 Max: 33.360149383545 Min: 1.186587095261

SNAPAccuracy

../DCU/g15may.032.dat.3g

e232t0dl.dat.digi3G

Comparing: ../DCU/g15may.032.dat.3g

with e232t0dl.dat.digi3G Average: 7.437493115664 Stdev: 2.892679452896 Max: 33.360149383545 Min: 1.979132175446 7.3.33 Stats.033

/usr1/figd/DIS2.2/dis_lite3.

stats

Frames: 501

Average: 0.00289479 Maximum: 0.0088 2nd Max: 0.004053 Minimum: 0.001483

RateErr: 0

/usr1/figd/DIS2.2/dis lite4.

stats

Frames: 501

Average: 0.00322275 Maximum: 0.009096 2nd Max: 0.008798 Minimum: 0.001581

RateErr: 0

/sg16/usr1/nets/GATEWA

Y/gateway_lite2.stats

Frames: 502

Average: 0.0060818 Maximum: 0.020366 2nd Max: 0.011667 Minimum: 0.000282

/sg16/usr1/nets/GATEWA

Y/gateway_lite1.stats

Frames: 501

Average: 0.00660095 Maximum: 0.025211 2nd Max: 0.013645 Minimum: 0.000394

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs: 1455 Count: 1148 Average: 1627.01 Maximum: 3378.38 2nd Max: 3367 Minimum: -2457

Frames: 586412 Average: 0.000233547 Maximum: 0.016807 2nd Max: 0.011468 Minimum: 8.9e-05

PDUs from Net1: 1580 PDUs from Net2: 1455

PDU Buffer 1
-- Stats from
CircularBuffer -NumPass: 1580

Average: 0.0456345 Variance: 0.000102354 Maximum: 0.079192 2nd Max: 0.0785 Minimum: 0.009887

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 1455 Average: 0.0455142 Variance: 9.90863e-05 Maximum: 0.074546 2nd Max: 0.073655 Minimum: 0.013939

-- End Stats from CircularBuffer --

SNAPPdus.pl Average: 0.062960

Maximum: 1.531239 Minimum: 0.000013 Variance: 0.006593 Std Dev: 0.081200

SNAPTimes.pl e242t0dl.dat

Sel-J Tss avg.:

0.0013199343936120681

Sel-J Tns avg.:

0.0012407316103606313

Sel-J Tnr avg.:

0.0015005308150630406

Sel-J Trs avg.:

0.00062031212738885449

Sel-J NIU avg.:

0.0027575586479776084

Sel-J Nius avg.:

0.0012407316103606313

Sel-J Niur avg.:

0.0015005308150630406

Sel-J Tgs avg.:

0.0031291908550628868

Sel-J Tgr avg.:

0.0018633558647707105

DCUAccuracy j15may.033.dat.g g15may.033.dat.ownship Average: 17.375934602249 Stdev: 27.580282211304 Max: 99.118240356445 Min: 0.040163110942

DCUAccuracy g15may.033.dat.j

j15may.033.dat.ownship Average: 8.600018115661 Stdev : 18.107067108154 Max : 83.987037658691 Min : 0.046957429498 **SNAPAccuracy**

../DCU/j15may.033.dat.1j e242t0dl.dat.digi1J

Comparing: ../DCU/j15may.033.dat.1j

with e242t0dl.dat.digi1J Average: 4.742873826617 Stdev: 2.412235498428 Max : 33.360149383545 Min : 0.631610274315

SNAPAccuracy

../DCU/j15may.033.dat.2j e242t0dl.dat.digi2J

Comparing: ../DCU/i15may.033.dat.2i

with e242t0dl.dat.digi2J Average: 5.459455325330 Stdev: 2.735097646713 Max: 33.360149383545 Min : 1.307728171349

SNAPAccuracy

../DCU/j15may.033.dat.3j e242t0dl.dat.digi3J

Comparing: ../DCU/j15may.033.dat.3j

with e242t0dl.dat.digi3J Average: 7.387491197893 Stdev: 2.685887098312 Max : 33.360149383545 Min : 2.944225549698

SNAPAccuracy

../DCU/j15may.033.dat.1g e242t0dl.dat.digi1G

Comparing: ../DCU/j15may.033.dat.1g

with e242t0dl.dat.digi1G Average: 21.725006400934 Stdev: 6.631310462952 Max: 66.838798522949 Min : 2.438243150711

SNAPAccuracy

../DCU/j15may.033.dat.2g e242t0dl.dat.digi2G

Comparing: ../DCU/j15may.033.dat.2g

with e242t0dl.dat.digi2G Average: 23.032971858011 Stdev: 7.479759216309 Max : 66.970787048340 Min: 3.450212955475

SNAPAccuracy

../DCU/j15may.033.dat.3g e242t0dl.dat.digi3G

Comparing: ../DCU/i15may.033.dat.3g

with e242t0dl.dat.digi3G Average: 24.348889365399 Stdev: 7.717843055725 Max : 67.045822143555 Min : 4.824683189392

SNAPAccuracy

../DCU/g15may.033.dat.1i e242t0dl.dat.digi1J

Comparing:

../DCU/g15may.033.dat.1j with e242t0dl.dat.digi1J

Average:

21.794933132419 Stdev: 6.870101451874 Max: 83.451171875000

Min : 4.103374958038

SNAPAccuracy

../DCU/g15may.033.dat.2j e242t0dl.dat.digi2J

Comparing:

../DCU/q15may.033.dat.2i with e242t0dl.dat.digi2J

Average:

23.461365024168

Stdev: 8.855196952820 Max : 83.648208618164 Min : 3.541624784470

SNAPAccuracy

../DCU/g15may.033.dat.3j e242t0dl.dat.digi3J

Comparing:

../DCU/g15may.033.dat.3j with e242t0dl.dat.digi3J

Average:

23.924715966772

Stdev: 8.558182716370 Max : 83.648208618164 Min : 4.507001876831

SNAPAccuracy

../DCU/g15may.033.dat.1g e242t0dl.dat.digi1G

Comparing:

../DCU/g15may.033.dat.1g with e242t0dl.dat.digi1G Average: 4.501001972428 Stdev: 2.169620513916 Max : 33.360149383545

SNAPAccuracy

../DCU/g15may.033.dat.2g e242t0dl.dat.digi2G

Min : 0.763353109360

Comparing:

../DCU/g15may.033.dat.2g with e242t0dl.dat.digi2G Average: 5.041297465023 Stdev: 2.424380064011

Max: 33.360149383545 Min : 1.528330087662

SNAPAccuracy

../DCU/g15may.033.dat.3g

e242t0dl.dat.digi3G

Comparing: ../DCU/g15may.033.dat.3g

with e242t0dl.dat.digi3G Average: 7.882511926609 Stdev: 2.511408567429 Max : 33.360149383545 Min : 3.187976837158

7.3.34 Stats.034

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 499

Average: 0.00132236 Maximum: 0.015127 2nd Max: 0.004251 Minimum: 0.001087

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 499

Average: 0.00130133 Maximum: 0.015324 2nd Max: 0.003065 Minimum: 0.001087

/sq16/usr1/nets/DISNET/disnet7.stats

PDUs : 29 Count: 25 Average: 1668.89

Maximum: 2525.25 2nd Max: 2022.24 Minimum: -136.836

Frames: 281413 Average: 0.000204016 Maximum: 0.010198 2nd Max: 0.010098 Minimum: 8.8e-05

PDUs from Net1: 24 PDUs from Net2: 29

PDU Buffer 1

- Stats from CircularBuffer --

NumPass: 24 Average: 0.0456022 Variance: 7.87026e-05 Maximum: 0.065845 2nd Max: 0.057738 Minimum: 0.020861

- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 29

Average: 0.0456726 Variance: 6.5709e-05 Maximum: 0.06624 2nd Max: 0.055167 Minimum: 0.028771

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.048946 Maximum: 0.070249 Minimum: 0.023280 Variance: 0.000070 Std Dev: 0.008350

SNAPTimes.pl e213t3.dat

Sel-J Tss avg.:

0.0013003876737932717

Sel-J Tns avg.:

0.00078785486935237963

Sel-J Tnr avg.:

0.0029542067594581817

Sel-J Trs avg.:

0.00042900397647917455

Sel-J NIU avg.:

0.0037420616288105614

Sel-J Nius avg.:

0.00078785486935237963

Sel-J Niur avg.:

0.0029542067594581817

Sel-J Tgs avg.:

0.00026751093423039383

Sel-J Tgr avg.:

0.00045639562642036996

DCUAccuracy j15may.034.dat.g

g15may.034.dat.ownship Average: 14.554429029062 Stdev: 1.025653004646 Max : 19.867740631104

Min : 12.744205474854

DCUAccuracy g15may.034.dat.j

j15may.034.dat.ownship Average: 13.712765691726 Stdev: 0.340674847364 Max: 15.732733726501 Min: 13.092820167542

SNAPAccuracy

../DCU/j15may.034.dat.1j

e213t3.dat.digi1J

Comparing: ../DCU/j15may.034.dat.1j

with e213t3.dat.digi1J Average: 0.048387096774 Stdev: 0.536638855934 Max : 6.000000000000

Min : 0.000000000000

SNAPAccuracy

../DCU/j15may.034.dat.2j

e213t3.dat.digi2J

Comparing:

../DCU/j15may.034.dat.2j with e213t3.dat.digi2J

Average: 0.072580645161

Stdev: 0.655908465385 Max : 6.000000000000

Min : 0.000000000000

SNAPAccuracy

../DCU/j15may.034.dat.3j

e213t3.dat.digi3J

Comparing:

../DCU/i15may.034.dat.3j

with e213t3.dat.digi3J

Average: 0.096774193548

Stdev: 0.755830645561

Max : 6.000000000000

Min : 0.000000000000

SNAPAccuracy

../DCU/j15may.034.dat.1g

e213t3.dat.digi1G

Comparing:

../DCU/j15may.034.dat.1g with e213t3.dat.digi1G

Average: 7.387847940127

Stdev: 1.632933378220

Max: 9.197540283203

Min : 5.514999866486

SNAPAccuracy

../DCU/j15may.034.dat.2g

e213t3.dat.digi2G

Comparing:

../DCU/j15may.034.dat.2g

with e213t3.dat.digi2G

Average:

12.126450250788

Stdev: 6.267703056335

Max: 18.462999343872

Min : 5.514999866486

SNAPAccuracy

../DCU/j15may.034.dat.3g

e213t3.dat.digi3G

Comparing:

../DCU/j15may.034.dat.3g

with e213t3.dat.digi3G

Average: 7.393734118803

Stdev: 1.632775425911

Max: 9.197540283203

Min : 5.514999866486

../DCU/g15may.034.dat.1i

e213t3.dat.digi1J

SNAPAccuracy

Comparing: ../DCU/g15may.034.dat.1j

with e213t3.dat.digi1J

Average: 5.892537232337

Stdev: 0.106814458966

Max : 6.093999862671

Min : 5.691999912262

SNAPAccuracy

../DCU/g15may.034.dat.2j

e213t3.dat.digi2J

Comparing: ../DCU/g15may.034.dat.2j

with e213t3.dat.digi2J

Average: 5.892537232337

Stdev: 0.106814458966

Max : 6.093999862671

Min : 5.691999912262

SNAPAccuracy

../DCU/g15may.034.dat.3j

e213t3.dat.digi3J

Comparing: ../DCU/g15may.034.dat.3j

with e213t3.dat.digi3J

Average: 7.637298348473

Stdev: 1.707251667976

Max: 9.501520156860 Min : 5.692999839783

SNAPAccuracy

../DCU/g15may.034.dat.1g

e213t3.dat.digi1G

Comparing: ../DCU/g15may.034.dat.1g

with e213t3.dat.digi1G

Average: 0.048387096774

Stdev: 0.536638855934

Max : 6.000000000000

Min : 0.000000000000

SNAPAccuracy

../DCU/g15may.034.dat.2g

e213t3.dat.digi2G

Comparing: ../DCU/g15may.034.dat.2g

with e213t3.dat.digi2G

Average: 0.048387096774

Stdev: 0.536638855934

Max : 6.000000000000

Min : 0.000000000000

SNAPAccuracy

../DCU/g15may.034.dat.3g

e213t3.dat.digi3G

Comparing: ../DCU/g15may.034.dat.3g

with e213t3.dat.digi3G

Average: 0.048387096774

Stdev: 0.536638855934

Max : 6.000000000000

Min : 0.00000000000

7.3.35 Stats.035

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 488

Average: 0.0021822 Maximum: 0.012372 2nd Max: 0.006229 Minimum: 0.001087

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 488

Average: 0.00203261 Maximum: 0.010776 2nd Max: 0.004746 Minimum: 0.00089

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 475 Count: 462 Average: 1737.45 Maximum: 3378.38 2nd Max: 3378.38 Minimum: -226.937

Frames: 315378 Average: 0.000205611 Maximum: 0.010692 2nd Max: 0.010692 Minimum: 1.8e-05

PDUs from Net1: 466 PDUs from Net2: 475

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 466 Average: 0.0448974 Variance: 0.000107233 Maximum: 0.072172 2nd Max: 0.070492 Minimum: 0.011765

-- End Stats from CircularBuffer --

PDU Buffer 2

- Stats from CircularBuffer --

NumPass: 475 Average: 0.0451891 Variance: 9.74268e-05 Maximum: 0.073953 2nd Max: 0.072074 Minimum: 0.017696

- End Stats from CircularBuffer -

SNAPPdus.pl

Average: 0.047570 Maximum: 0.082348 Minimum: 0.009206 Variance: 0.000133 Std Dev: 0.011541

SNAPTimes.pl e223t3.dat

Sel-J Tss avg.:

0.0013337932404343161

Sel-J Tns avg.:

0.00078785486935237963

Sel-J Tnr avg.:

0.0029542067594581817

Sel-J Trs avg.:

0.0006097216703514726

Sel-J NIU avg.:

0.0037420616288105614

Sel-J Nius avg.:

0.00078785486935237963

Sel-J Niur avg.:

0.0029542067594581817

Sel-J Tgs avg.:

0.00071645924457206314

Sel-J Tgr avg.:

0.0010486679918247979

DCUAccuracy j15may.035.dat.g

g15may.035.dat.ownship

Average:

14.635708491668

Stdev: 0.936201453209 Max: 16.416971206665

Min : 13.012741088867

DCUAccuracy g15may.035.dat.j

j15may.035.dat.ownship

Average:

13.741992242619

Stdev: 0.417775481939 Max: 16.125265121460 Min: 13.090836524963

SNAPAccuracy

../DCU/j15may.035.dat.1j

e223t3.dat.digi1J

Comparing:

../DCU/j15may.035.dat.1j with e223t3.dat.digi1J Average: 0.348000000000 Stdev: 1.995719432831

Max : 12.00000000000

Min : 0.00000000000

SNAPAccuracy

../DCU/j15may.035.dat.2j

e223t3.dat.digi2J

Comparing: ../DCU/j15may.035.dat.2j

with e223t3.dat.digi2J Average: 0.348000000000 Stdev: 1.995719432831 Max: 12.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/j15may.035.dat.3j

e223t3.dat.digi3J

Comparing: ../DCU/j15may.035.dat.3j

with e223t3.dat.digi3J Average: 0.001127422707 Stdev: 0.001556698466 Max: 0.004999999888 Min: 0.0000000000000

SNAPAccuracy

../DCU/j15may.035.dat.1g

e223t3.dat.digi1G

Comparing: ../DCU/j15may.035.dat.1g

with e223t3.dat.digi1G Average: 6.283305259166 Stdev: 3.293175697327 Max: 78.059799194336 Min: 5.567999839783

SNAPAccuracy

../DCU/j15may.035.dat.2g

e223t3.dat.digi2G

Comparing: ../DCU/j15may.035.dat.2g

with e223t3.dat.digi2G Average: 6.283305259166 Stdev: 3.293175697327 Max: 78.059799194336 Min: 5.567999839783

SNAPAccuracy

../DCU/j15may.035.dat.3g

e223t3.dat.digi3G

Comparing: ../DCU/j15may.035.dat.3g

with e223t3.dat.digi3G Average: 20.050180161274 Stdev: 2.688156843185 Max: 28.966890335083 Min: 13.247109413147

SNAPAccuracy

../DCU/g15may.035.dat.1j

e223t3.dat.digi1J

Comparing: ../DCU/g15may.035.dat.1i

with e223t3.dat.digi1J Average: 6.117830359762 Stdev: 0.227962449193 Max: 6.514450073242

Min : 5.717000007629

SNAPAccuracy

../DCU/g15may.035.dat.2j

e223t3.dat.digi2J

Comparing: ../DCU/g15may.035.dat.2j

with e223t3.dat.digi2J Average: 6.117830359762 Stdev: 0.227962449193 Max : 6.514450073242 Min : 5.717000007629

SNAPAccuracy

../DCU/g15may.035.dat.3j

e223t3.dat.digi3J

Comparing: ../DCU/g15may.035.dat.3j

with e223t3.dat.digi3J Average: 20.137851498975 Stdev: 2.720696449280 Max : 29.811691284180 Min: 13.394820213318

SNAPAccuracy

../DCU/g15may.035.dat.1g

e223t3.dat.digi1G

Comparing: ../DCU/g15may.035.dat.1g

with e223t3.dat.digi1G Average: 0.516000000000 Stdev: 2.979554176331 Max : 18.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/g15may.035.dat.2g

e223t3.dat.digi2G

Comparing: ../DCU/g15may.035.dat.2g

with e223t3.dat.digi2G Average: 0.348000000000 Stdev: 1.995719432831 Max : 12.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/g15may.035.dat.3g

e223t3.dat.digi3G

Comparing: ../DCU/g15may.035.dat.3g

with e223t3.dat.digi3G Average: 0.001111340233 Stdev: 0.001567707397 Max : 0.004999999888 Min : 0.000000000000

7.3.36 Stats.036

/sq16/usr1/nets/GATEWAY/gateway1.s tats

Frames: 493

Average: 0.00313931 Maximum: 0.015522 2nd Max: 0.004548 Minimum: 0.001185

/sg16/usr1/nets/GATEWA

Y/gateway2.stats Frames: 492

Average: 0.00287035 Maximum: 0.013742 2nd Max: 0.00435 Minimum: 0.001088

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs : 937 Count : 818 Average: 1901.65 Maximum: 3378.38 2nd Max: 3367 Minimum: -2463.05

Frames: 223375 Average: 0.000210562 Maximum: 0.010593 2nd Max: 0.010198 Minimum: 8.9e-05

PDUs from Net1: 925 PDUs from Net2: 937

PDU Buffer 1 -- Stats from CircularBuffer ---NumPass: 925 Average: 0.0454979 Variance: 0.00010433 Maximum: 0.078797 2nd Max: 0.078119 Minimum: 0.00524

-- End Stats from CircularBuffer ---

PDU Buffer 2 -- Stats from CircularBuffer --NumPass: 937 Average: 0.0455085 Variance: 9.70667e-05 Maximum: 0.07504 2nd Max: 0.073952 Minimum: 0.012755 -- End Stats from CircularBuffer ---

SNAPPdus.pl Average: 0.048260 Maximum: 0.081675

Minimum: 0.008293 Variance: 0.000101 Std Dev: 0.010033

SNAPTimes.pl e233t3.dat

Sel-J Tss avg.:

0.0013011491052745277

Sel-J Tns avg.:

0.00078785486935237963

Sel-J Tnr avg.:

0.0029542067594581817

Sel-J Trs avg.:

0.0005440954274611796

Sel-J NIU avg.:

0.0037420616288105614

Sel-J Nius avg.:

0.00078785486935237963

Sel-J Niur avg.:

0.0029542067594581817

Sel-J Tas ava.:

0.0011225805171648741

Sel-J Tgr avg.:

0.0013998747506967207

DCUAccuracy j15may.036.dat.g q15may.036.dat.ownship Average: 14.545128552086 Stdev: 0.967542588711 Max : 16.136028289795 Min : 12.817781448364

DCUAccuracy g15may.036.dat.j j15may.036.dat.ownship Average: 13.692786222611 Stdev: 0.391305893660 Max : 17.085613250732

Min : 13.083166122437

SNAPAccuracy

../DCU/j15may.036.dat.1j

e233t3.dat.digi1J

Comparing: ../DCU/j15may.036.dat.1j

with e233t3.dat.digi1J Average: 0.228000000000 Stdev: 1.616173267365 Max : 12.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/j15may.036.dat.2j

e233t3.dat.digi2J

Comparing: ../DCU/j15may.036.dat.2j

with e233t3.dat.digi2J Average: 0.001122024515 Stdev: 0.001555802883 Max : 0.004999999888

Min : 0.000000000000

SNAPAccuracy

../DCU/j15may.036.dat.3j

e233t3.dat.digi3J

Comparing: ../DCU/j15may.036.dat.3j

with e233t3.dat.digi3J Average: 11.615595905834 Stdev: 5.175945758820 Max: 16.838010787964 Min: 0.000000000000

SNAPAccuracy

../DCU/j15may.036.dat.1g

e233t3.dat.digi1G

Comparing: ../DCU/j15may.036.dat.1g

with e233t3.dat.digi1G Average: 27.575119636387 Stdev: 21.251142501831 Max: 48.465999603271 Min: 5.560999870300

SNAPAccuracy

../DCU/j15may.036.dat.2g

e233t3.dat.digi2G

Comparing: ../DCU/j15may.036.dat.2g

with e233t3.dat.digi2G Average: 19.716410787688 Stdev: 2.680716991425 Max: 30.099052429199 Min: 13.212736129761

SNAPAccuracy

../DCU/j15may.036.dat.3g

e233t3.dat.digi3G

Comparing: ../DCU/j15may.036.dat.3g

with e233t3.dat.digi3G Average: 19.936252940607 Stdev: 2.681409835815 Max: 34.244609832764 Min: 13.212736129761

SNAPAccuracy

../DCU/g15may.036.dat.1j

e233t3.dat.digi1J

Comparing: ../DCU/g15may.036.dat.1j

with e233t3.dat.digi1J Average: 6.926153031529 Stdev: 2.066865205765 Max: 47.904598236084 Min: 5.632999897003

SNAPAccuracy

../DCU/g15may.036.dat.2j

e233t3.dat.digi2J

Comparing: ../DCU/g15may.036.dat.2j

with e233t3.dat.digi2J Average: 19.953584741518 Stdev: 2.642477989197 Max: 29.900144577026 Min: 13.153573989868 **SNAPAccuracy**

../DCU/g15may.036.dat.3j e233t3.dat.digi3J

Comparing:

../DCU/g15may.036.dat.3j

with e233t3.dat.digi3J

Average:

20.305129916761

Stdev: 2.692066907883 Max: 29.771770477295 Min: 13.153493881226

SNAPAccuracy

../DCU/g15may.036.dat.1g

e233t3.dat.digi1G

Comparing:

../DCU/g15may.036.dat.1g with e233t3.dat.digi1G Average: 0.228000000000 Stdev: 1.616173267365

SNAPAccuracy

../DCU/g15may.036.dat.2g

e233t3.dat.digi2G

Comparing:

../DCU/g15may.036.dat.2g with e233t3.dat.digi2G Average: 0.001100000026

SNAPAccuracy

../DCU/g15may.036.dat.3g

e233t3.dat.digi3G

Comparing:

../DCU/g15may.036.dat.3g with e233t3.dat.digi3G

Average:

13.332147815783

Stdev: 2.899268627167 Max: 16.838010787964 Min: 0.0000000000000

7.3.37 Stats.037

/sg16/usr1/nets/GATEWA

Y/gateway1.stats Frames: 501

Average: 0.00378139

Maximum: 0.016114 2nd Max: 0.004252 Minimum: 0.00089

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 501

Average: 0.00358905 Maximum: 0.015917 2nd Max: 0.004251 Minimum: 0.00089

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 1410 Count: 825 Average: 1926.89 Maximum: 5154.64 2nd Max: 2890.17 Minimum: -9259.26

Frames: 184342 Average: 0.000216394 Maximum: 0.010594 2nd Max: 0.010198 Minimum: 8.8e-05

PDUs from Net1: 1398 PDUs from Net2: 1410

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 1398 Average: 0.0458124 Variance: 9.88642e-05 Maximum: 0.074446 2nd Max: 0.07237 Minimum: 0.017499

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 1410 Average: 0.0452543 Variance: 9.28673e-05 Maximum: 0.076325 2nd Max: 0.075138 Minimum: 0.012259

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.050307 Maximum: 0.083470 Minimum: 0.014700 Variance: 0.000104 Std Dev: 0.010220

SNAPTimes.pl e243t3.dat

Sel-J Tss avg.:

0.0013304652086557232

Sel-J Tns avg.:

0.00078785486935237963

Sel-J Tnr avg.:

0.0029542067594581817

Sel-J Trs avg.:

0.00040496421480740218

Sel-J NIU avg.:

0.0037420616288105614

Sel-J Nius avg.:

0.00078785486935237963

Sel-J Niur avg.:

0.0029542067594581817

Sel-J Tgs avg.:

0.0017151809145328932

Sel-J Tgr avg.:

0.0013943339962323399

DCUAccuracy j15may.037.dat.g

g15may.037.dat.ownship Average: 14.537564898601 Stdev: 0.985204100609 Max: 16.377378463745 Min: 12.767276763916

DCUAccuracy g15may.037.dat.j

j15may.037.dat.ownship Average: 13.720685345648 Stdev: 0.354263067245 Max: 15.596238136292 Min: 13.109342575073

SNAPAccuracy

../DCU/j15may.037.dat.1j

e243t3.dat.digi1J

Comparing: ../DCU/j15may.037.dat.1j

with e243t3.dat.digi1J Average: 0.000078418512 Stdev : 0.000345211680 Max : 0.004000000190 Min : 0.000000000000

SNAPAccuracy

../DCU/j15may.037.dat.2j

e243t3.dat.digi2J

Comparing: ../DCU/j15may.037.dat.2j

with e243t3.dat.digi2J Average: 0.001107428596 Stdev: 0.001549632405 Max: 0.004999999888 Min: 0.0000000000000

SNAPAccuracy

../DCU/j15may.037.dat.3j

e243t3.dat.digi3J

Comparing: ../DCU/j15may.037.dat.3j

with e243t3.dat.digi3J Average: 13.389977340007 Stdev: 2.673674583435 Max: 16.838010787964 Min: 9.170519828796

SNAPAccuracy

../DCU/j15may.037.dat.1g

e243t3.dat.digi1G

Comparing:

../DCU/j15may.037.dat.1g

with e243t3.dat.digi1G

Average:

20.219264049801

Stdev: 2.643971681595

Max : 30.476045608521

Min : 13.277921676636

SNAPAccuracy

../DCU/j15may.037.dat.2g

e243t3.dat.digi2G

Comparing:

../DCU/j15may.037.dat.2g

with e243t3.dat.digi2G

Average:

20.319167808393

Stdev: 2.634943962097

Max : 30.476043701172 Min : 13.851448059082

SNAPAccuracy

../DCU/j15may.037.dat.3g

e243t3.dat.digi3G

Comparing:

../DCU/j15may.037.dat.3g

with e243t3.dat.digi3G

Average:

20.360253084504

Stdev: 2.629372835159 Max: 30.476043701172

Min : 13.851448059082

SNAPAccuracy

../DCU/g15may.037.dat.1j

e243t3.dat.digi1J

Comparing:

../DCU/g15may.037.dat.1j

with e243t3.dat.digi1J

Average:

20.566974446450

Stdev: 2.640756845474

Max : 29.928142547607

Min : 13.539631843567

SNAPAccuracy

../DCU/g15may.037.dat.2j e243t3.dat.digi2J

Comparing:

../DCU/g15may.037.dat.2j

with e243t3.dat.digi2J Average:

20.731308366416

Stdev: 2.634149074554

Max : 29.928461074829

Min : 13.539557456970

SNAPAccuracy

../DCU/g15may.037.dat.3j

e243t3.dat.digi3J

Comparing: ../DCU/g15may.037.dat.3j

with e243t3.dat.digi3J

Average: 20.753300196742 Stdev: 2.698128461838 Max: 29.928554534912

Min: 13.539482116699

SNAPAccuracy

../DCU/g15may.037.dat.1g

e243t3.dat.digi1G

Comparing: ../DCU/g15may.037.dat.1g

with e243t3.dat.digi1G Average: 0.001051106664 Stdev: 0.001544576953 Max: 0.004999999888 Min: 0.0000000000000

SNAPAccuracy

../DCU/g15may.037.dat.2g

e243t3.dat.digi2G

Comparing: ../DCU/g15may.037.dat.2g

with e243t3.dat.digi2G Average: 0.001084507068 Stdev: 0.001559323748 Max: 0.004999999888 Min: 0.0000000000000

SNAPAccuracy

../DCU/g15may.037.dat.3g

e243t3.dat.digi3G

Comparing: ../DCU/g15may.037.dat.3g

with e243t3.dat.digi3G Average: 13.389975377012 Stdev: 2.673676967621 Max: 16.838010787964 Min: 9.170610427856

7.3.38 Stats.038

/sg16/usr1/nets/GATEWAY/gateway_lit

e2.stats

Frames: 496

Average: 0.00146807 Maximum: 0.011567 2nd Max: 0.004153

Minimum: 0.001185

/sg16/usr1/nets/GATEWAY/gateway_lit

e1.stats Frames: 495

Average: 0.00161111 Maximum: 0.011483 2nd Max: 0.011384 Minimum: 0.001285

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs : 41 Count : 28

Average: -2161.47 Maximum: 3378.38 2nd Max: 1863.19 Minimum: -111111

Frames: 190116 Average: 0.000201226 Maximum: 0.010198 2nd Max: 0.010198 Minimum: 8e-06

PDUs from Net1: 25 PDUs from Net2: 41

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 25 Average: 0.0422909 Variance: 5.02897e-05 Maximum: 0.052399 2nd Max: 0.051806 Minimum: 0.027584

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 41 Average: 0.0468725 Variance: 0.000119309 Maximum: 0.066537 2nd Max: 0.052498 Minimum: 0.029076

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.498252 Maximum: 2.353907 Minimum: 0.000039 Variance: 0.367558 Std Dev: 0.606266

SNAPTimes.pl e213t3l.dat

Sel-J Tss avg.:

0.0013730019882041776

Sel-J Tns avg.:

0.00078785486935237963

Sel-J Tnr avg.:

0.0029542067594581817

Sel-J Trs avg.:

0.00040034194824412636

Sel-J NIU avg.:

0.0037420616288105614

Sel-J Nius avg.:

0.00078785486935237963

Sel-J Niur avg.:

0.0029542067594581817

Sel-J Tgs avg.:

0.00045966799171325782

Sel-J Tgr avg.:

0.00052838966246485108

DCUAccuracy

j15may.038.dat.g

g15may.038.dat.ownship

Average:

22.529305617663

Stdev: 11.672454833984 Max: 63.043933868408

Min : 12.872275352478

DCUAccuracy

g15may.038.dat.j

j15may.038.dat.ownship

Average:

21.898318672180

Stdev: 12.761020660400

Max : 57.871875762939 Min : 13.050671577454

SNAPAccuracy

../DCU/j15may.038.dat.1j

e213t3l.dat.digi1J

Comparing:

../DCU/j15may.038.dat.1j with e213t3l.dat.digi1J Average: 0.012121212121

Stdev: 0.269407421350 Max: 6.0000000000000

Min : 0.00000000000

SNAPAccuracy

../DCU/j15may.038.dat.2j

e213t3l.dat.digi2J

Comparing:

../DCU/j15may.038.dat.2j with e213t3l.dat.digi2J

Average: 0.000000000000

SNAPAccuracy

../DCU/j15may.038.dat.3j e213t3l.dat.digi3J

Comparing:

../DCU/j15may.038.dat.3j with e213t3l.dat.digi3J Average: 0.012121212121 Stdev: 0.269407421350 Max: 6.000000000000

Min : 0.000000000000

SNAPAccuracy

../DCU/j15may.038.dat.1g

e213t3l.dat.digi1G

Comparing: ../DCU/j15may.038.dat.1g

with e213t3l.dat.digi1G Average: 14.857947237638 Stdev : 9.039339065552

Max : 24.017000198364 Min : 5.310999870300

SNAPAccuracy

../DCU/j15may.038.dat.2g

e213t3l.dat.digi2G

Comparing: ../DCU/j15may.038.dat.2g

with e213t3l.dat.digi2G Average: 14.857947237638 Stdev: 9.039339065552 Max: 24.017000198364 Min: 5.310999870300

SNAPAccuracy

../DCU/j15may.038.dat.3g

e213t3l.dat.digi3G

Comparing: ../DCU/j15may.038.dat.3g

with e213t3l.dat.digi3G Average: 14.857947237638 Stdev: 9.039339065552 Max: 24.017000198364 Min: 5.310999870300

SNAPAccuracy

../DCU/g15may.038.dat.1j

e213t3l.dat.digi1J

Comparing: ../DCU/g15may.038.dat.1i

with e213t3l.dat.digi1J Average: 14.905931484456 Stdev: 8.980231285095 Max: 24.018999099731 Min: 5.660999774933

SNAPAccuracy

../DCU/g15may.038.dat.2j

e213t3l.dat.digi2J

Comparing: ../DCU/g15may.038.dat.2j

with e213t3l.dat.digi2J Average: 14.905931484456 Stdev: 8.980231285095 Max: 24.018999099731 Min: 5.660999774933

SNAPAccuracy

../DCU/g15may.038.dat.3j

e213t3l.dat.digi3J

Comparing: ../DCU/g15may.038.dat.3j

with e213t3l.dat.digi3J Average: 11.886426764118 Stdev: 5.984049797058 Max: 18.027999877930 Min: 5.660999774933

SNAPAccuracy.

../DCU/g15may.038.dat.1g

e213t3l.dat.digi1G

Comparing: ../DCU/g15may.038.dat.1g

with e213t3l.dat.digi1G Average: 0.012121212121 Stdev: 0.269407421350 Max: 6.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/g15may.038.dat.2g

e213t3l.dat.digi2G

Comparing: ../DCU/g15may.038.dat.2g

with e213t3l.dat.digi2G Average: 0.012121212121 Stdev: 0.269407421350 Max: 6.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/g15may.038.dat.3g

e213t3l.dat.digi3G

Comparing: ../DCU/g15may.038.dat.3g

with e213t3l.dat.digi3G Average: 0.012121212121 Stdev: 0.269407421350 Max: 6.0000000000000 Min: 0.0000000000000

7.3.39 Stats.039

/sg16/usr1/nets/GATEWAY/gateway_lit

e2.stats Frames: 498 Average: 0.00219 Maximum: 0.012175 2nd Max: 0.007416 Minimum: 0.001087

/sg16/usr1/nets/GATEWAY/gateway lit

e1.stats Frames : 500

Average: 0.00222292 Maximum: 0.012373 2nd Max: 0.007611 Minimum: 0.001285 /sg16/usr1/nets/DISNET/di

snet7.stats PDUs: 497 Count: 479 Average: 1767.06 Maximum: 3378.38 2nd Max: 3378.38 Minimum: -108.589

Frames: 208201 Average: 0.000205431 Maximum: 0.010989 2nd Max: 0.010593 Minimum: 9e-05

PDUs from Net1: 487 PDUs from Net2: 497

PDU Buffer 1
-- Stats from
CircularBuffer -NumPass: 487
Average: 0.0449599
Variance: 9.77403e-05
Maximum: 0.071579
2nd Max: 0.070195
Minimum: 0.01483
-- End Stats from
CircularBuffer --

PDU Buffer 2
-- Stats from
CircularBuffer -NumPass: 497
Average: 0.045451
Variance: 0.00010471
Maximum: 0.07148
2nd Max: 0.069108
Minimum: 0.012162
-- End Stats from
CircularBuffer --

SNAPPdus.pl Average: 0.061780 Maximum: 0.327981 Minimum: 0.000011 Variance: 0.002221 Std Dev: 0.047124

SNAPTimes.pl e223t3l.dat Sel-J Tss avg.:

0.0013115467199262799

Sel-J Tns avg.:

0.00078785486935237963

Sel-J Tnr avg.:

0.0029542067594581817

Sel-J Trs avg.:

0.00055406162978513778

Sel-J NIU avg.:

0.0037420616288105614

Sel-J Nius avg.:

0.00078785486935237963

Sel-J Niur avg.:

0.0029542067594581817

Sel-J Tgs avg.:

0.00092436580542173182

DCUAccuracy j15may.039.dat.g

g15may.039.dat.ownship Average: 22.790337522102 Stdev: 11.819415092468 Max: 63.044075012207 Min: 12.796799659729

DCUAccuracy g15may.039.dat.j

j15may.039.dat.ownship Average: 21.795738718202 Stdev: 12.759063720703 Max: 57.890727996826 Min: 13.179029464722

SNAPAccuracy

../DCU/j15may.039.dat.1j

e223t3l.dat.digi1J

Comparing: ../DCU/j15may.039.dat.1j

with e223t3l.dat.digi1J Average: 0.012024048096 Stdev: 0.268327623606 Max: 6.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/j15may.039.dat.2j

e223t3l.dat.digi2J

Comparing: ../DCU/j15may.039.dat.2j

with e223t3l.dat.digi2J Average: 0.012024048096 Stdev : 0.268327623606 Max : 6.000000000000 Min : 0.000000000000

SNAPAccuracy

../DCU/j15may.039.dat.3j

e223t3l.dat.digi3J

Comparing: ../DCU/j15may.039.dat.3j

with e223t3l.dat.digi3J Average: 0.001098654644 Stdev: 0.001546271844 Max: 0.004999999888 Min: 0.0000000000000

SNAPAccuracy

../DCU/i15may.039.dat.1g

e223t3l.dat.digi1G

Comparing: ../DCU/j15may.039.dat.1g

with e223t3l.dat.digi1G Average: 14.758996845977

Stdev: 9.044953346252 Max: 24.024000167847 Min: 5.536000251770

SNAPAccuracy

../DCU/j15may.039.dat.2g

e223t3l.dat.digi2G

Comparing: ../DCU/j15may.039.dat.2g

with e223t3l.dat.digi2G Average: 14.758996845977 Stdev: 9.044953346252 Max: 24.024000167847 Min: 5.536000251770

SNAPAccuracy

../DCU/j15may.039.dat.3g

e223t3l.dat.digi3G

Comparing: ../DCU/j15may.039.dat.3g

with e223t3l.dat.digi3G Average: 19.941473427204 Stdev: 3.124156236649 Max: 53.669384002686 Min: 13.091437339783

SNAPAccuracy

../DCU/g15may.039.dat.1j

e223t3l.dat.digi1J

Comparing: ../DCU/g15may.039.dat.1j

with e223t3l.dat.digi1J Average: 14.863663658922 Stdev: 8.881689071655 Max: 24.000000000000 Min: 5.823999881744

SNAPAccuracy

../DCU/g15may.039.dat.2j

e223t3l.dat.digi2J

Comparing: ../DCU/g15may.039.dat.2j

with e223t3l.dat.digi2J Average: 17.827677838715 Stdev: 11.906262397766 Max: 30.017000198364 Min: 5.823999881744

SNAPAccuracy

../DCU/g15may.039.dat.3j

e223t3l.dat.digi3J

Comparing: ../DCU/g15may.039.dat.3j

with e223t3l.dat.digi3J Average: 19.985418543642 Stdev: 2.792095422745 Max: 30.211503982544 Min: 13.170028686523

SNAPAccuracy

../DCU/g15may.039.dat.1g

e223t3l.dat.digi1G

Comparing: ../DCU/g15may.039.dat.1g

with e223t3l.dat.digi1G

Average: 0.012024048096 Stdev: 0.268327623606 Max: 6.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/g15may.039.dat.2g

e223t3l.dat.digi2G

Comparing:

../DCU/g15may.039.dat.2g with e223t3l.dat.digi2G Average: 0.012024048096 Stdev: 0.268327623606 Max: 6.000000000000

Min : 0.00000000000

SNAPAccuracy ../DCU/g15may.039.dat.3g

e223t3l.dat.digi3G

Comparing:

../DCU/g15may.039.dat.3g with e223t3l.dat.digi3G Average: 0.001082329343 Stdev: 0.001557224779

Max : 0.004999999888 Min : 0.000000000000

7.3.40 Stats 040

/sg16/usr1/nets/GATEWA Y/gateway_lite2.stats

Frames: 488

Average: 0.00273261 Maximum: 0.006525 2nd Max: 0.003757 Minimum: 0.001088

/sg16/usr1/nets/GATEWA Y/gateway_lite1.stats

Frames: 488

Average: 0.00317113 Maximum: 0.014251 2nd Max: 0.00959 Minimum: 0.001482

/sg16/usr1/nets/DISNET/di

snet7.stats PDUs : 929 Count : 790 Average: 1893.86 Maximum: 3378.38 2nd Max: 3378.38 Minimum: -4830.92

Frames: 205639

Average: 0.00020831 Maximum: 0.010989 2nd Max: 0.010593 Minimum: 1.8e-05

PDUs from Net1: 923 PDUs from Net2: 929

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 923 Average: 0.0454607 Variance: 9.65247e-05 Maximum: 0.071593 2nd Max: 0.07059 Minimum: 0.015819

- End Stats from CircularBuffer --

PDU Buffer 2

- Stats from CircularBuffer --

NumPass: 929 Average: 0.0451016 Variance: 9.57175e-05 Maximum: 0.07761 2nd Max: 0.07504 Minimum: 0.017203

- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.054626 Maximum: 0.211019 Minimum: 0.000014 Variance: 0.001614 Std Dev: 0.040172

SNAPTimes.pl e233t3l.dat

Sel-J Tss avg.:

0.0013226043737817937

Sel-J Tns avg.:

0.00078785486935237963

Sel-J Tnr avg.:

0.0029542067594581817

Sel-J Trs avg.:

0.00053934194795624403

Sel-J NIU avg.:

0.0037420616288105614

Sel-J Nius avg.:

0.00078785486935237963

Sel-J Niur avg.:

0.0029542067594581817

Sel-J Tgs avg.:

0.0014723856863056572

Sel-J Tgr avg.:

0.0010695825048553838

DCUAccuracy j15may.040.dat.g g15may.040.dat.ownship Average: 22.221412471327 Stdev: 11.990793228149 Max : 63.014205932617 Min : 6.639164447784

DCUAccuracy g15may.040.dat.j j15may.040.dat.ownship

Average: 21.338990138207 Stdev: 13.912253379822 Max: 91.025497436523 Min: 2.300557613373

SNAPAccuracy

../DCU/j15may.040.dat.1j

e233t3l.dat.digi1J

Comparing: ../DCU/j15may.040.dat.1j

with e233t3l.dat.digi1J Average: 0.012422360248 Stdev: 0.272726684809 Max: 6.000000000000 Min: 0.000000000000

SNAPAccuracy

../DCU/j15may.040.dat.2j

e233t3l.dat.digi2J

Comparing: ../DCU/j15may.040.dat.2j

with e233t3l.dat.digi2J Average: 0.001134215793 Stdev : 0.001563231228 Max : 0.004999999888 Min : 0.0000000000000

SNAPAccuracy

../DCU/j15may.040.dat.3j

e233t3l.dat.digi3J

Comparing: ../DCU/j15may.040.dat.3j

with e233t3l.dat.digi3J Average: 12.585419189864 Stdev: 4.466804981232 Max: 16.838010787964 Min: 0.000000000000

SNAPAccuracy

../DCU/j15may.040.dat.1g

e233t3l.dat.digi1G

Comparing: ../DCU/j15may.040.dat.1g

with e233t3l.dat.digi1G Average: 15.131419900626 Stdev : 9.057382583618 Max : 24.008998870850 Min : 0.229300007224

SNAPAccuracy

../DCU/j15may.040.dat.2g

e233t3l.dat.digi2G

Comparing: ../DCU/j15may.040.dat.2g

with e233t3l.dat.digi2G Average: 19.824401728047 Stdev: 4.496970176697 Max: 83.410537719727 Min: 13.229293823242

SNAPAccuracy

../DCU/j15may.040.dat.3g

e233t3l.dat.digi3G

Comparing:

../DCU/j15may.040.dat.3g

with e233t3l.dat.digi3G

Average:

20.084346478568

Stdev: 4.539556026459 Max: 83.410537719727

Min : 13.229293823242

SNAPAccuracy

../DCU/g15may.040.dat.1j

e233t3l.dat.digi1J

Comparing:

../DCU/g15may.040.dat.1j

with e233t3l.dat.digi1J

Average:

19.234500276546

Stdev: 11.993008613586

Max: 96.000000000000

Min: 5.888999938965

SNAPAccuracy

../DCU/g15may.040.dat.2j

e233t3l.dat.digi2J

Comparing:

../DCU/g15may.040.dat.2j with e233t3l.dat.digi2J

Average:

20.457723623514

Stdev: 4.029619693756 Max: 66.720298767090 Min: 11.800827980042

SNAPAccuracy

../DCU/g15may.040.dat.3j

e233t3l.dat.digi3J

Comparing:

../DCU/g15may.040.dat.3j with e233t3l.dat.digi3J

Average:

20.489006932444

Stdev: 3.482487440109

Max: 65.525703430176

Min: 11.800827980042

SNAPAccuracy

../DCU/g15may.040.dat.1g e233t3l.dat.digi1G

Comparing:

../DCU/g15may.040.dat.1g with e233t3l.dat.digi1G Average: 0.012396694215

Stdev: 0.272445380688 Max: 6.0000000000000 Min : 0.00000000000

SNAPAccuracy

../DCU/g15may.040.dat.2g

e233t3l.dat.digi2G

Comparing: ../DCU/g15may.040.dat.2g

with e233t3l.dat.digi2G Average: 0.001111801269 Stdev: 0.001570933382 Max: 0.004999999888 Min: 0.00000000000000

SNAPAccuracy

../DCU/g15may.040.dat.3g

e233t3l.dat.digi3G

Comparing: ../DCU/g15may.040.dat.3g

with e233t3l.dat.digi3G Average: 13.209276455377 Stdev: 3.175176620483 Max: 16.838010787964 Min: 0.0000000000000

7.3.41 Stats.041

/sg16/usr1/nets/GATEWAY/gateway_lit

e2.stats

Frames: 494

Average: 0.00340407 Maximum: 0.008206 2nd Max: 0.004943 Minimum: 0.001383

/sg16/usr1/nets/GATEWAY/gateway_lit

e1.stats

Frames: 495

Average: 0.00353728 Maximum: 0.006228 2nd Max: 0.004746 Minimum: 0.000988

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 1393 Count: 844 Average: 2021.95 Maximum: 3378.38 2nd Max: 3367 Minimum: -807.537

Frames: 635304 Average: 0.000205788 Maximum: 0.01089 2nd Max: 0.010593 Minimum: 8e-06 PDUs from Net1: 1376 PDUs from Net2: 1393

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 1376 Average: 0.0443786 Variance: 9.83307e-05 Maximum: 0.074546 2nd Max: 0.072173 Minimum: 0.017203

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 1393 Average: 0.0456823 Variance: 0.000100045 Maximum: 0.071876 2nd Max: 0.070787 Minimum: 0.018982

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.052595 Maximum: 0.180180 Minimum: 0.000020 Variance: 0.000751 Std Dev: 0.027397

SNAPTimes.pl e243t3l.dat

Sel-J Tss avg.:

0.001321176938749859

Sel-J Tns avg.:

0.00078785486935237963

Sel-J Tnr avg.:

0.0029542067594581817

Sel-J Trs avg.:

0.00046838568599902048

Sel-J NIU avg.:

0.0037420616288105614

Sel-J Nius avg.:

0.00078785486935237963

Sel-J Niur avg.:

0.0029542067594581817

Sel-J Tgs avg.:

0.0018630715704832696

Sel-J Tar ava.:

0.0010683081513428116

DCUAccuracy j15may.041.dat.g g15may.041.dat.ownship Average: 22.859073193901

Stdev: 14.742082595825 Max: 77.632774353027

Min : 3.493694067001

DCUAccuracy g15may.041.dat.j i15may.041.dat.ownship

Average:

20.708015030525

Stdev: 13.000161170959 Max : 57.728862762451 Min: 4.582142353058

SNAPAccuracy

../DCU/j15may.041.dat.1j

e243t3l.dat.digi1J

Comparing:

../DCU/i15mav.041.dat.1i with e243t3l.dat.digi1J Average: 0.000079538777 Stdev: 0.000347540539 Max : 0.004000000190

Min : 0.00000000000

SNAPAccuracy

../DCU/i15may.041.dat.2i e243t3l.dat.digi2J

Comparing:

../DCU/j15may.041.dat.2j with e243t3l.dat.digi2J Average: 0.001114065331 Stdev: 0.001551027875

Max : 0.004999999888 Min : 0.000000000000

SNAPAccuracy

../DCU/j15may.041.dat.3j

e243t3l.dat.digi3J

Comparing:

../DCU/j15may.041.dat.3j with e243t3l.dat.digi3J

Average:

13.436553357572

Stdev: 2.649827003479 Max : 16.838010787964

Min : 9.218936920166

SNAPAccuracy

../DCU/j15may.041.dat.1g

e243t3l.dat.digi1G

Comparing:

../DCU/j15may.041.dat.1g with e243t3l.dat.digi1G

Average:

20.507919629415

Stdev: 4.967357158661 Max: 83.410537719727 Min : 13.192347526550

SNAPAccuracy

../DCU/j15may.041.dat.2g

e243t3l.dat.digi2G

Comparing: ../DCU/j15may.041.dat.2g

with e243t3l.dat.digi2G Average: 20.775130665523 Stdev: 5.914266109467 Max : 83.440536499023 Min : 13.192347526550

SNAPAccuracy

../DCU/j15may.041.dat.3g

e243t3l.dat.digi3G

Comparing: ../DCU/j15may.041.dat.3g

with e243t3l.dat.digi3G Average: 20.620080147261 Stdev: 5.080368995667 Max: 83.410537719727 Min : 13.192347526550

SNAPAccuracy

../DCU/g15may.041.dat.1j

e243t3l.dat.digi1J

Comparing: ../DCU/g15mav.041.dat.1i

with e243t3l.dat.digi1J Average: 20.469190773417 Stdev: 4.203167438507 Max : 66.720298767090 Min: 13.279849052429

SNAPAccuracy

../DCU/q15may.041.dat.2i

e243t3l.dat.digi2J

Comparing: ../DCU/g15may.041.dat.2j

with e243t3l.dat.digi2J Average: 20.701761504385 Stdev: 5.118382453918 Max: 83.440536499023 Min : 13.279705047607

SNAPAccuracy

../DCU/g15may.041.dat.3j

e243t3l.dat.digi3J

Comparing: ../DCU/g15may.041.dat.3j

with e243t3l.dat.digi3J Average: 20.587649900405 Stdev: 4.260998249054 Max : 66.720298767090 Min : 13.279705047607

SNAPAccuracy

../DCU/q15may.041.dat.1q

e243t3l.dat.digi1G

Comparing: ../DCU/q15may.041.dat.1q

with e243t3l.dat.digi1G Average: 0.001063951145 Stdev: 0.001549582346 Max : 0.004999999888 Min : 0.00000000000

SNAPAccuracy ../DCU/g15may.041.dat.2g e243t3l.dat.digi2G

Comparing: ../DCU/g15may.041.dat.2g

with e243t3l.dat.digi2G Average: 0.001097759700 Stdev: 0.001564178616 Max: 0.004999999888 Min: 0.00000000000000

SNAPAccuracy ../DCU/g15may.041.dat.3g e243t3l.dat.digi3G Comparing: ../DCU/g15may.041.dat.3g with e243t3l.dat.digi3G

Average: 13.441250853529 Stdev : 2.649172544479 Max : 16.838010787964 Min : 9.218936920166

7.4 16 May 97 Data

7.4.1 Stats.001

/usr1/figd/DIS2.2/dis4.stats

Frames: 503

Average: 0.00319968 Maximum: 0.013362 2nd Max: 0.007316 Minimum: 0.001186

RateErr: 0

/usr1/figd/DIS2.2/dis3.stats

Frames: 503

Average: 0.00339766 Maximum: 0.014251 2nd Max: 0.007909 Minimum: 0.001285

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 1999 Count: 1505 Average: 2065.01 Maximum: 10638.3 2nd Max: 5050.51 Minimum: -3687.77

Frames: 504611 Average: 0.000209459 Maximum: 0.010198 2nd Max: 0.010198 Minimum: 1.8e-05

PDUs from Net1: 1996 PDUs from Net2: 1999

PDU Buffer 1

-- Stats from CircularBuffer -- NumPass: 1996

Average: 0.0461187 Variance: 0.000102192 Maximum: 0.081762 2nd Max: 0.077017 Minimum: 0.014929

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer -- NumPass: 1999

Average: 0.0453305 Variance: 9.7702e-05 Maximum: 0.075929 2nd Max: 0.07583 Minimum: 0.013545 -- End Stats from CircularBuffer --

SNAPPdus.pl

ERROR: counted PDUs

was zero

SNAPTimes.pl Sel-J Tss avg.:

0.0012812803177522666

Sel-J Tns avg.:

0.00089253280310087077

Sel-J Tnr avg.:

0.0023912226640763756

Sel-J Trs avg.:

0.00040452683926097099

Sel-J NIU avg.:

0.003318960238316385

Sel-J Tgs avg.: 0 Sel-J Tgr avg.:

0.00029482305997998359

DCUAccuracy j16may.001.dat.g g16may.001.dat.ownship Average: 0.396929544827

Stdev: 1.543980240822 Max: 13.342158317566 Min: 0.015805618837

where G sees J

Average: 0.356703061829 Stdev : 1.503319025040 Max : 12.919676780701 Min : 0.057019643486

7.4.2 Stats.002

/usr1/figd/DIS2.2/dis_lite3.

stats

Frames: 503

Average: 0.00334924 Maximum: 0.013262 2nd Max: 0.010281 Minimum: 0.00168

RateErr: 0

/usr1/figd/DIS2.2/dis_lite4.

stats

Frames: 503

Average: 0.00316648 Maximum: 0.010381 2nd Max: 0.001582 Minimum: 0.001582

RateErr: 0

/sg16/usr1/nets/DISNET/disnet7.stats

PDUs: 2003 Count: 1681 Average: 2011.53 Maximum: 5050.51 2nd Max: 3378.38 Minimum: -3278.69

Frames: 402210 Average: 0.000210626 Maximum: 0.011185 2nd Max: 0.010198 Minimum: 5.8e-05

PDUs from Net1: 2002 PDUs from Net2: 2003

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 2002 Average: 0.0456137 Variance: 0.000105337 Maximum: 0.079784 2nd Max: 0.0784 Minimum: 0.012952

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 2003 Average: 0.0457124 Variance: 9.71475e-05 Maximum: 0.081069 2nd Max: 0.072271 Minimum: 0.017203

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.051190 Maximum: 0.702798 Minimum: 0.000005 Variance: 0.001416 Std Dev: 0.037630

SNAPTimes.pl Sel-J Tss avg.:

0.0013345844929847611

Sel-J Tns avg.:

0.0013812485087317393

Sel-J Tnr avg.:

0.0018310019881584891

Sel-J Trs avg.:

0.00048019880713352461

Sel-J NIU avg.:

0.0032586381708991125

Sel-J Tgs avg.: 0

Sel-J Tgr avg.: 0

DCUAccuracy j16may.002.dat.g g16may.002.dat.ownship Average: 28.592132015940 Stdev: 28.865129470825 Max: 78.053840637207 Min: 0.025997569785

DCUAccuracy g16may.002.dat.j j16may.002.dat.ownship Average: 0.340214493118 Stdev: 2.075827598572 Max: 40.696105957031

Min : 0.055642072111

SNAPAccuracy ../DCU/j16may.002.dat.1j e211t0dl.dat.digi1J

Comparing: ../DCU/j16may.002.dat.1j

with e211t0dl.dat.digi1J Average: 0.105862951793 Stdev: 0.596238553524 Max: 12.000000000000 Min: 0.000000000000

SNAPAccuracy ../DCU/j16may.002.dat.2j e211t0dl.dat.digi2J

Comparing: ../DCU/j16may.002.dat.2j

with e211t0dl.dat.digi2J Average: 0.328900585273 Stdev: 0.583019018173 Max: 12.0000000000000 Min: 0.0000000000000

SNAPAccuracy ../DCU/j16may.002.dat.3j e211t0dl.dat.digi3J

Comparing: ../DCU/j16may.002.dat.3j

with e211t0dl.dat.digi3J Average: 0.639550927054 Stdev: 0.566661775112 Max: 12.000000000000 Min: 0.0000000000000

SNAPAccuracy ../DCU/j16may.002.dat.1g e211t0dl.dat.digi1G

Comparing: ../DCU/j16may.002.dat.1g

with e211t0dl.dat.digi1G Average: 0.159426181767 Stdev: 1.169373035431 Max: 24.000000000000 Min: 0.013000000268

SNAPAccuracy ../DCU/j16may.002.dat.2g e211t0dl.dat.digi2G Comparing:

../DCU/j16may.002.dat.2g with e211t0dl.dat.digi2G Average: 0.421386871675 Stdev : 1.410739779472 Max : 24.000000000000 Min : 0.225099995732

SNAPAccuracy
../DCU/j16may.002.dat.3g
e211t0dl.dat.digi3G
Comparing:
../DCU/j16may.002.dat.3g
with e211t0dl.dat.digi3G
Average: 0.735151720047
Stdey: 1.356716632843

Max : 24.000000000000 Min : 0.550999999046

SNAPAccuracy ../DCU/g16may.002.dat.1j e211t0dl.dat.digi1J Comparing: ../DCU/g16may.002.dat.1j with e211t0dl.dat.digi1J Average: 0.246138767573

Stdev: 2.226493835449 Max: 30.0000000000000 Min: 0.003000000026

SNAPAccuracy
../DCU/g16may.002.dat.2j
e211t0dl.dat.digi2J
Comparing:
../DCU/g16may.002.dat.2j
with e211t0dl.dat.digi2J
Average: 0.615938746041
Stdev: 2.490287303925

Max : 36.000000000000

Min : 0.111299999058

SNAPAccuracy ../DCU/g16may.002.dat.3j e211t0dl.dat.digi3J Comparing: ../DCU/g16may.002.dat.3j with e211t0dl.dat.digi3J Average: 0.806154751537 Stdev: 1.520868897438 Max: 24.0000000000000

SNAPAccuracy
../DCU/g16may.002.dat.1g
e211t0dl.dat.digi1G
Comparing:
../DCU/g16may.002.dat.1g
with e211t0dl.dat.digi1G

Average: 0.023475361412

Min : 0.467400014400

Stdev: 0.270722776651 Max: 6.0000000000000 Min: 0.0000000000000

SNAPAccuracy ../DCU/g16may.002.dat.2g e211t0dl.dat.digi2G

Comparing: ../DCU/g16may.002.dat.2g

with e211t0dl.dat.digi2G Average: 0.409390320351 Stdev: 0.578450739384 Max: 12.000000000000 Min: 0.0000000000000

SNAPAccuracy ../DCU/g16may.002.dat.3g e211t0dl.dat.digi3G

Comparing: ../DCU/g16may.002.dat.3g

with e211t0dl.dat.digi3G Average: 0.737756906436 Stdev: 0.561252832413 Max: 12.000000000000 Min: 0.0000000000000

7.4.3 Stats.003

SNAPPdus.pl Average: 0.050427 Maximum: 0.087129 Minimum: 0.012094 Variance: 0.000104 Std Dev: 0.010208

SNAPTimes.pl e213t0.dat Sel-J Tss avg.: 0.0013122306163151976 Sel-J Tns avg.: 0.00098407157035669502 Sel-J Tnr avq.: 0.0034472385688305777 Sel-J Trs avg.: 0.00062499801188783261 Sel-J NIU avg.: 0.0044313101391872728 Sel-J Nius avg.: 0.00098407157035669502 Sel-J Niur avg.: 0.0034472385688305777 Sel-J Tgs avg.: 0.002189954274220491 Sel-J Tgr avg.: 0.0019573161034406464

DCUAccuracy j16may.003.dat.g g16may.003.dat.ownship Average: 14.549808504128 Stdev: 1.033882021904 Max: 16.360784530640 Min: 12.753773689270

DCUAccuracy g16may.003.dat.j

j16may.003.dat.ownship Average: 13.692180382483 Stdev: 0.705694317818 Max: 14.381189346313 Min: 0.285843551159

SNAPAccuracy

../DCU/j16may.003.dat.1j

e213t0.dat.digi1J

Comparing: ../DCU/j16may.003.dat.1j

with e213t0.dat.digi1J Average: 0.000000000000 Stdev: 0.00000000000 Max: 0.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/j16may.003.dat.2j

e213t0.dat.digi2J

Comparing: ../DCU/j16may.003.dat.2j

with e213t0.dat.digi2J Average: 0.012048192771 Stdev: 0.268596351147 Max: 6.0000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/j16may.003.dat.3j

e213t0.dat.digi3J

Comparing: ../DCU/j16may.003.dat.3j

with e213t0.dat.digi3J Average: 0.012048192771 Stdev: 0.268596351147 Max: 6.0000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/j16may.003.dat.1g

e213t0.dat.digi1G

Comparing: ../DCU/j16may.003.dat.1g

with e213t0.dat.digi1G Average: 5.922870923633 Stdev: 0.076282717288 Max: 7.085999965668 Min: 5.818200111389

SNAPAccuracy

../DCU/j16may.003.dat.2g

e213t0.dat.digi2G

Comparing: ../DCU/j16may.003.dat.2g

with e213t0.dat.digi2G

Average: 5.922790118075 Stdev: 0.076345920563 Max: 7.085999965668 Min: 5.818200111389

SNAPAccuracy

../DCU/j16may.003.dat.3g

e213t0.dat.digi3G Comparing:

../DCU/j16may.003.dat.3g with e213t0.dat.digi3G

Average: 5.922689085547 Stdev: 0.076329179108 Max: 7.085999965668

Min : 5.818200111389

SNAPAccuracy

../DCU/g16may.003.dat.1j

e213t0.dat.digi1J Comparing:

../DCU/g16may.003.dat.1j with e213t0.dat.digi1J Average: 6.068948351735

Stdev: 0.056793127209 Max: 6.144199848175 Min: 4.906300067902

SNAPAccuracy

../DCU/g16may.003.dat.2j e213t0.dat.digi2J

Comparing:

../DCU/g16may.003.dat.2j with e213t0.dat.digi2J Average: 6.069160715288 Stdev: 0.055969759822 Max: 6.144199848175

Min : 4.915100097656

SNAPAccuracy

../DCU/g16may.003.dat.3j

e213t0.dat.digi3J

Comparing:

../DCU/g16may.003.dat.3j with e213t0.dat.digi3J Average: 6.068941687765 Stdev: 0.055930696428 Max: 6.144199848175

Min : 4.915100097656

SNAPAccuracy

../DCU/g16may.003.dat.1g

e213t0.dat.digi1G

Comparing:

../DCU/g16may.003.dat.1g

with e213t0.dat.digi1G Average: 0.000000000000

Stdev: 0.000000000000

SNAPAccuracy

../DCU/g16may.003.dat.2g

e213t0.dat.digi2G

Comparing: ../DCU/g16may.003.dat.2g

with e213t0.dat.digi2G Average: 0.012048192771 Stdev: 0.268596351147 Max: 6.000000000000 Min: 0.0000000000000

SNAPAccuracy

../DCU/g16may.003.dat.3g

e213t0.dat.digi3G

Comparing: ../DCU/g16may.003.dat.3g

with e213t0.dat.digi3G Average: 0.012048192771 Stdev: 0.268596351147 Max: 6.000000000000 Min: 0.0000000000000

7.4.4 Stats.004

/sg16/usr1/nets/GATEWAY/gateway_lit

e2.stats

Frames: 501

Average: 0.00470688 Maximum: 0.01048 2nd Max: 0.008108 Minimum: 0.003262

/sg16/usr1/nets/GATEWAY/gateway_lit

e1.stats Frames : 501

Average: 0.00534634 Maximum: 0.010183 2nd Max: 0.008997 Minimum: 0.003658

/sg16/usr1/nets/GATEWAY/gateway1.s

tats

Frames: 501

Average: 0.00477912 Maximum: 0.015819 2nd Max: 0.004053 Minimum: 0.002768

/sg16/usr1/nets/GATEWAY/gateway2.s

tats

Frames: 501

Average: 0.00444623 Maximum: 0.011272 2nd Max: 0.008008

Minimum: 0.002472

/sq16/usr1/nets/DISNET/disnet7.stats

PDUs: 2007 Count: 1319 Average: 1947.52 Maximum: 5050.51 2nd Max: 3378.38 Minimum: -2212.39

Frames: 261233 Average: 0.000211018 Maximum: 0.011483 2nd Max: 0.011286 Minimum: 8.8e-05

PDUs from Net1: 2004 PDUs from Net2: 2007

PDU Buffer 1

-- Stats from CircularBuffer --

NumPass: 2004 Average: 0.0452011 Variance: 0.000105129 Maximum: 0.082553 2nd Max: 0.082158 Minimum: 0.01315

-- End Stats from CircularBuffer --

PDU Buffer 2

-- Stats from CircularBuffer --

NumPass: 2007 Average: 0.0444393 Variance: 0.000107436 Maximum: 0.077709 2nd Max: 0.074842 Minimum: 0.010776

-- End Stats from CircularBuffer --

SNAPPdus.pl

Average: 0.050270 Maximum: 0.120156 Minimum: 0.000003 Variance: 0.000468 Std Dev: 0.021630

SNAPTimes.pl e213t0l.dat

Sel-J Tss avg.:

0.0013866381708194204

Sel-J Tns avg.:

0.00098407157035669502

Sel-J Tnr avg.:

0.0034472385688305777

Sel-J Trs avg.:

0.00055173558664876616

Sel-J NIU avg.:

0.0044313101391872728

Sel-J Nius avg.:

0.00098407157035669502

Sel-J Niur avg.:

0.0034472385688305777

Sel-J Tgs avg.:

0.002189954274220491

Sel-J Tgr avg.:

0.0019573161034406464

DCUAccuracy

j16may.004.dat.g

g16may.004.dat.ownship

Average:

14.562221897010

Stdev: 1.036454796791 Max: 16.494485855103

Min : 12.773726463318

DCUAccuracy

g16may.004.dat.j

j16may.004.dat.ownship

Average:

13.820977047236

Stdev: 1.851223707199 Max: 54.266124725342

Min : 13.094814300537

SNAPAccuracy

../DCU/j16may.004.dat.1j

e213t0l.dat.digi1J

Comparing:

../DCU/j16may.004.dat.1j with e213t0l.dat.digi1J

Average: 0.0120000000000

Stdev: 0.268059700727 Max: 6.0000000000000

Min : 0.00000000000

SNAPAccuracy

../DCU/j16may.004.dat.2j

e213t0l.dat.digi2J

Comparing:

../DCU/j16may.004.dat.2j with e213t0l.dat.digi2J Average: 0.012000000000

Stdev: 0.268059700727

Max : 6.0000000000000

Min : 0.000000000000

SNAPAccuracy

../DCU/j16may.004.dat.3j

e213t0l.dat.digi3J

Comparing:

../DCU/j16may.004.dat.3j

with e213t0l.dat.digi3J

Average: 0.012000000000

Stdev: 0.268059700727

Max : 6.000000000000

Min : 0.00000000000

SNAPAccuracy

../DCU/j16may.004.dat.1g

e213t0l.dat.digi1G

Comparing: ../DCU/j16may.004.dat.1g

with e213t0l.dat.digi1G

Average: 5.988526555800 Stdev: 1.207887411118

Max : 30.0000000000000

Min: 5.848000049591

SNAPAccuracy

../DCU/j16may.004.dat.2g

e213t0l.dat.digi2G

Comparing: ../DCU/j16may.004.dat.2g

with e213t0l.dat.digi2G Average: 5.916490941096

Stdev: 0.028035294265 Max: 6.352180004120

Min : 5.848000049591

SNAPAccuracy

../DCU/j16may.004.dat.3g

e213t0l.dat.digi3G

Comparing: ../DCU/j16may.004.dat.3g

with e213t0l.dat.digi3G Average: 5.953919386671 Stdev: 0.811820566654

Max : 24.000000000000 Min : 5.848100185394

SNAPAccuracy

../DCU/g16may.004.dat.1j

e213t0l.dat.digi1J

Comparing: ../DCU/g16may.004.dat.1j

with e213t0l.dat.digi1J Average: 6.110854762492 Stdev: 0.805230498314 Max: 24.000000000000

Min : 5.755000114441

SNAPAccuracy

../DCU/g16may.004.dat.2j

e213t0l.dat.digi2J

Comparing: ../DCU/g16may.004.dat.2j

with e213t0l.dat.digi2J Average: 6.148797618982 Stdev: 1.136903643608 Max: 24.000000000000 Min: 5.755000114441

SNAPAccuracy

../DCU/g16may.004.dat.3j

e213t0l.dat.digi3J

Comparing: ../DCU/g16may.004.dat.3j

with e213t0l.dat.digi3J Average: 6.148659565756 Stdey: 1.136417627335

Stdev: 1.136417627335 Max: 24.0000000000000

Min : 5.793999671936

SNAPAccuracy ../DCU/g16may.004.dat.1g e213t0l.dat.digi1G

Comparing: ../DCU/g16may.004.dat.1g

with e213t0l.dat.digi1G Average: 0.012000000000 Stdev: 0.268059700727 Max: 6.000000000000 Min: 0.000000000000

SNAPAccuracy ../DCU/g16may.004.dat.2g e213t0l.dat.digi2G

Comparing: ../DCU/g16may.004.dat.2g

with e213t0l.dat.digi2G Average: 0.012000000000 Stdev: 0.268059700727 Max: 6.000000000000 Min: 0.0000000000000

SNAPAccuracy ../DCU/g16may.004.dat.3g e213t0l.dat.digi3G

Comparing: ../DCU/g16may.004.dat.3g

with e213t0l.dat.digi3G Average: 0.012000000000 Stdev : 0.268059700727 Max : 6.000000000000 Min : 0.000000000000